

4-18-18

Pilsen Old RV

0705- START Pallardy on site. GHD(1) held daily safety meeting discussed gang activity, site traffic, + cold stress.

0710 - RW Collins () prepping for removal work for the daisy in H. Kramer lot.

0715- Weather 33°F, cloudy, wind ENE 16 mph, 65-85% chance of precipitation rain to snow 1300 to 1600.

0725 - RWC to backfill N excavation in BY at **Non-Responsive**. RWC will then do a soil scrape on the W side of BY around bushes. E side excavation will continue with vac truck tomorrow.

0740 - RWC at **Non-Responsive**, RWC places demarcation barrier in N side excavation.

0745 - RWC begins backfilling N side excavation.

0850 - RWC utilizing vibratory compaction to flatten out soil.

0915 - RWC continues backfilling N side excavation.

1050 - RWC places demarcation barrier in E side excavation.

4-18-18

Pilsen Old RV

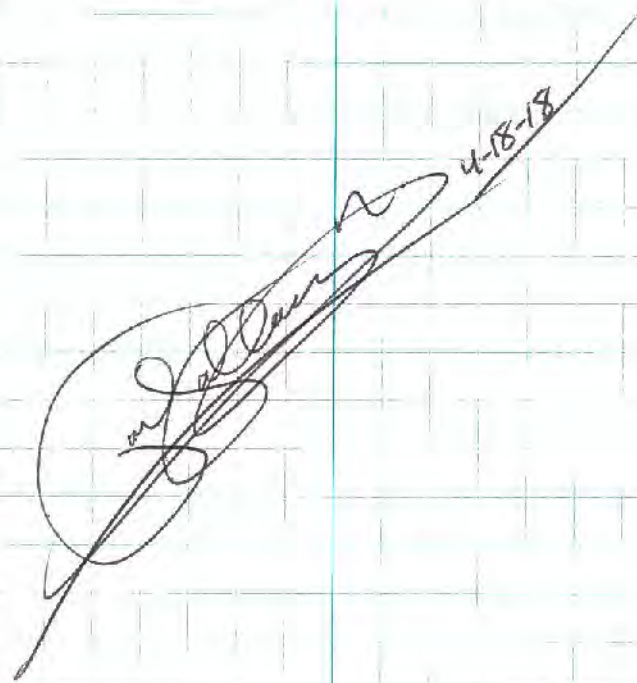
1140 - RWC continues backfill of N side excavation area.

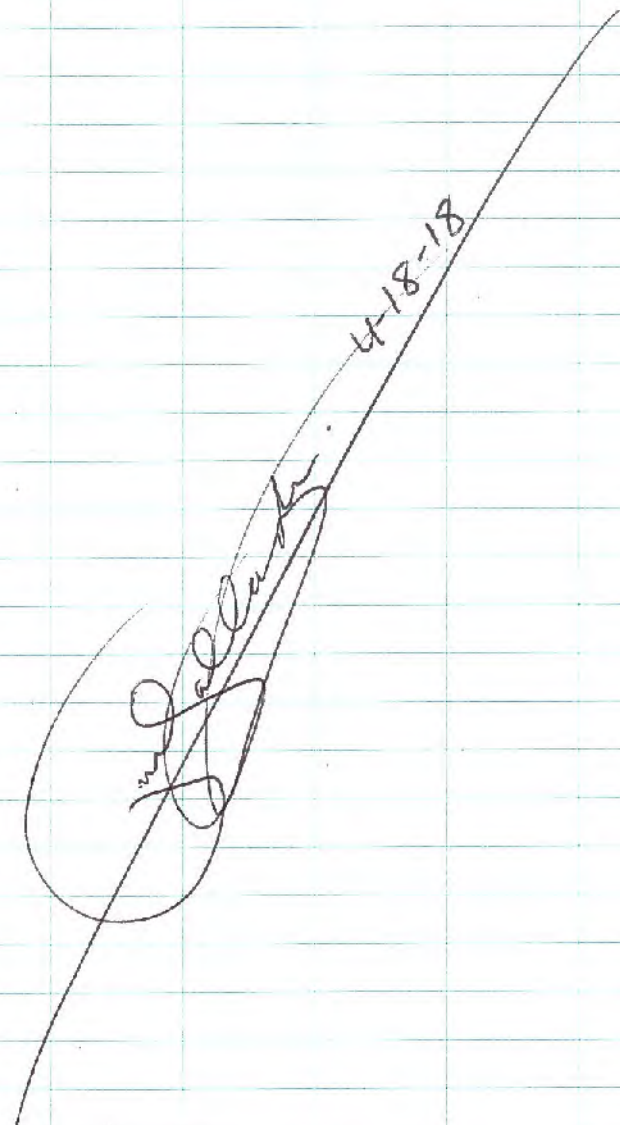
1200 - RWC takes lunch break.

1245 - RWC continues backfill work.

1300 - Vibratory compaction + backfill of N excavation complete.

1330 - RWC to complete backfilling E side excavation for remainder of day. START Pallardy off site.



MADE IN TACOMA
— SINCE 1916 —

Rite in the Rain®

DEFYING MOTHER NATURE

Yes, Rite in the Rain
is a wood-based & recyclable
paper, but unlike plain paper...
it won't turn to mush
when exposed to:

**USE WET OR DRY**

most pens stop writing when wet

- ALL PENCILS
- RITE IN THE RAIN PENS
- WAX MARKERS
- CRAYONS
- OIL PASTELS / PAINT

**WHEN DRY ONLY**

what you write won't wash off

- PERMANENT MARKERS
- STANDARD BALLPOINTS

**WON'T WORK**

water-based inks bead off sheet

- GEL PENS
- MOST HIGHLIGHTERS
- FOUNTAIN PENS
- WATER COLORS
- ACRYLIC PAINT

**ALL-WEATHER TOUGH!****BRAND HISTORY**

The Rite in the Rain story began a century ago in the forests of the Great Pacific Northwest. Entrepreneur Jerry Darling recognized the logging industry's need for a durable material that could be written on and survive in poor weather conditions. Jerry developed a special coating that created a unique moisture shield on the hand-dipped sheets of paper that he and his wife, Mary, processed at their home.

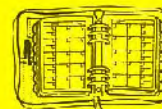
From these humble beginnings our first all-weather paper was born. Over the many years we've perfected and patented our environmentally responsible coating process. Still located in Tacoma, our continued mission is to provide innovative products for professionals and enthusiasts who brave the outdoors.

EQUIPPING MULTIPLE INDUSTRIES WORLD-WIDE

products available



BOUND BOOKS

COVERS, KITS
& PLANNERSLOOSE LEAF
& BINDERSWRITING
INSTRUMENTSPRINTER / COPIER
BLANK SHEETS
RiteintheRain.com


©JL DARLING LLC
2514 PACIFIC HWY EAS.
TACOMA, WA 98424 USA



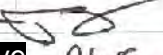
RiteintheRain.com

4-24-18

Pilsen 042 RV

1000 - START Pallardy on site for sampling & removal oversight. Sampling notes in log book CH226. — 

1005 - Weather 59°F, mostly sunny, wind NNE 9 mph, 0% chance of precip.

1050 - START at **Non-Responsive**. Removal work complete & RWC conducting backfill work. Soil placed in ~~the~~ west excavation area. Gravel placed under stairs. Demarcation barrier placed in garden excavation on E side (not full 2 ft excavation due to large concrete slab). RWC utilizing vibratory compactor to compact soil. — 


1245 - START back at **Non-Responsive**, RWC continued backfill work on west excavation area.


1315 - START Pallardy off site.


4-24-18

4-25-18

Pilsen 042A


0700 - START Pallardy on site. GHD(1) & RWC(5) on site, GHD holds daily safety meeting. Discuss Vacuum hose safety, site traffic, & awareness of gang activity. — 


0705 - RWC to H. Kramer yard to prep for removal work. — 


0715 - Vac truck on site. — 

0725 - RWC on site, finishing up restoration work at **Non-Responsive**

0730 - Weather 46°F mostly sunny, wind 19 mph NNE, 0% chance of precip.

0810 - RWC watering sod placed in W yard area, RWC leveling out backfill/soil in E garden. — 

0825 - RWC at **Non-Responsive**, prepping for removal work. — 

0846 - RWC begins excavation in SW corner of yard area with vac truck collecting excavated soil. — 

0900 - RWC small truck lined with plastic for brick & building debris from excav.

1030 - RWC placing additional fine topsoil on top of E garden at **Non-Responsive**

4-25-18

Pilsen Old RV

1030 cont - Topsoil is Scotts brand purchased from Home Depot. ~~fill~~

1100 - Fine topsoil placement complete.

1105 - RWC continues excavation work in BY of **Non-Responsive** to 1ft bgs.

1130 - START Pallardy off site. ~~fill~~

4-25-18

4-27-18

Pilsen Old RV

1000 - START Pallardy on site.

1005 - GHD(1) + RWC(RW Collins)(5) on site. RWC in BY of **Non-Responsive**

hand digging, transferring soil excavated soil by bucket to small truck. Truck bed lined with plastic.

1010 - Weather 50°F sunny, wind NNE 12mph, 15% chance of precipitation 1000 → 1500. ~~fill~~

1015 - Demarcation barrier placed in yard area excavation bottom at 1ft bgs. Partial soil backfill in S half of the yard. ~~fill~~

1030 - START, GHD, + RWC at **Non-Responsive** discussing removal plan. ~~fill~~

1110 - Excavation in BY garden to 2ft bgs complete and BY excavation ~~fill~~ complete. ~~fill~~

1200 - Demarcation barrier placement in BY complete. ~~fill~~

1215 - RWC continues backfill work in BY. ~~fill~~

1230 - START Pallardy off site. ~~fill~~

4-27-18

4-30-18

Pilsen OUG RV

~~1055~~ * Notes transferred to log book by START Pallardy on 5-1-18. Notes taken by START Renner on site 4-30-18 in a separate log book.

Non-Responsive

1015- START Renner on-site, Weather: 62°F, SW 8 mph, Sunny.

1020- GHD + RW Collins on site when START arrived. Backfilling at

Non-Responsive Filling clean dirt in the south end of the backyard.

1145- Continuing backfill @ Non-Responsive have pounded the soil in the south part of the backyard (30% complete).

1225- RW Collins continuing backfill + ground pounding mainly north in backyard (50% complete).

1245- Backfilling continues.

1330- START off-site, RW Collins will continue to backfill @ Non-Responsive (70% complete).

Notes transferred to log book on 5-1-18

5-1-18

Pilsen OUG RV

1000- START Pallardy on site, GHD (1) + RW Collins (RWC) (5) on site.

1005- Weather 75°F sunny, high of 82°F, wind SSW 15-20 mph, 0% chance of precip.

1010- START RWC is at Non-Responsive

St, backfill in the backyard yard area and garden is complete. RWC is placing mulch in garden areas.

1015- START + GHD mobilizing to sample at Non-Responsive Sample notes in assessment log book.

1120- RWC completed mulch placement in BY garden. RWC also completed sod placement in BY yard area. RWC is watering the sod.

1150- START and GHD complete Non-Responsive

Non-Responsive sampling and mobilized to Non-Responsive, RWC at Non-Responsive

prepping for restoration of BY excavation area. RWC to begin backfill work in BY today with conveyor belt.

1200- Owner requested thin gravel in BY last year to place pavers but changed

5-1-18

Pilsen DU2 RV

1200cont - his mind. Thin mulch layer placed over gravel. Owner okay with RWC placing backfill soil over mulch. Once backfill is complete seed will be placed in BY.

1235 - RWC has conveyor set up.

1240 - RWC begins backfill work.

1245 - START Pallardy off site.

in Pallardy
N. 5-1-18

5-2-18

Pilsen DU2 RI

1030 - START Pallardy on site. GHD(1), RWC(5) on site. RW Collins(RWC), GHD+START at **Non-Responsive** for backfill work in BY.

1045 - Weather 78°F partly cloudy, high of 83°F, wind SW 20mph, 15% chance of precipitation 1100-1500.

1050 - Rough soil backfill complete, RWC utilizing conveyor + wheelbarrow to backfill over rough compacted soil with pulverized soil.

1150 - RWC backfilling with pulverized soil from N side of BY to S.

1200 - RWC breaks for lunch.

1230 - RWC continues backfill work.

1300 - RWC completes backfill work, RWC begins evening out + grading backfill soil.

1315 - START Pallardy off-site.

in Pallardy
N. 5-2-18

5-3-18

Pilsen Old RV

1015 - START Pallardy on site. GHD(1)
+ RWC Collins (RWC) (5) on site.

1020 - Weather 56°F, high of 60°F,
cloudy, wind ENE 8mph, 0%
chance of precipitation.

1035 - RWC placing backfill in FY of
Non-Responsive

1045 - FY backfill complete.

1100 - RWC moves to BY to add some
additional soil. Side yard will
be left for tomorrow, gravel
will be placed in the side yards.

1200 - RWC takes lunch break.

1225 - RWC continues soil backfill in BY.

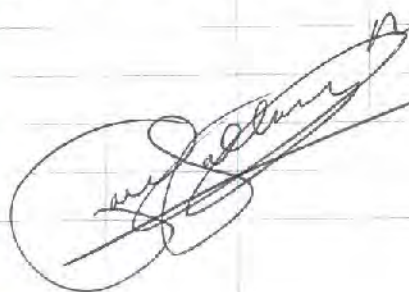
1245 - BY backfill complete, RWC obtaining sod.

1300 - Sod arrives, RWC begins sod placement
in BY.

1315 - RWC continues sod placement.

1330 - START off site (Pallardy).

5-3-18



5-4-18

Pilsen Old RV

1300 - START Pallardy on site.

1305 - Weather 67°F partly cloudy,
high of 74°F, wind WNW 11mph,
no chance of precipitation.

1310 - START Pallardy at **Non-Responsive**

RWC completed BY sod placement
and gravel placement in side yard

1315 - START Pallardy at **Non-Responsive**
with GHD(1) & RWC Collins (RWC) (4)

1320 - RWC completed excavation of
FY grass area to 1ft bgs. RWC
excavated by hand and transferred
excavated soil by bucket to truck.
Truck bed lined with plastic.

1325 - RWC excavating FY garden
to 2ft bgs.

1335 - Excavation work complete for
day, RWC will continue next week.

1340 - RWC demobing for day to drop
excavated soil off at H. Kramer Lot.
Excavation area caution taped off
for the weekend.

1350 - GHD + RWC off site to H. Kramer Lot,
START Pallardy off-site

5-4-18



Rite in the Rain

5-7-18

Pilsen Ouz RV

1100 - Notes transferred to log book by
 START Pallardy, ~~START~~ on 5-8-18,
 START Renner on site 5-7-18.

1100 - START Renner arrives on site,
 GHD (1) + RW Collins (RWC) (5) on site.
 Weather 68°F, high of 75°F, clear, wind
 5 mph N, no chance of precipitation.

1105 - RWC in front yard of **Non-Responsive**
 excavation complete. RWC utilizing
 a single conveyor to transfer CACo
 gravel to front yard soil area for
 backfill. Demarcation barrier
 placed at bottom of excavation.

Garden backfill with soil complete.

1115 - RWC begins gravel backfill work in front yard.

1200 - RWC + GHD take lunch break.

1230 - RWC continues gravel backfill
 work in front yard soil area.

1310 - RWC continues to backfill gravel,
 compacting + grading as gravel is placed.

1420 - RWC demobing for day to the Kramer lot.

1430 - START Renner off site.

[Handwritten signature]

5-8-18

Pilsen Ouz RV

1120 - START Pallardy on site at
Non-Responsive GHD (1) + RWC (5)
 (RW Collins) on site.

1125 - Weather 75°F, partly cloudy,
 high of 82°F, no chance of precipitation,
 wind 10 mph South.

1130 - RWC completed excavation on
 the S side of the BY. Stock piled
 S side excavated soil on N side
 of BY covered with plastic.
 Vac truck will be on site tomorrow
 to remove stock piled soil +
 soil on N side of property.

1135 - RWC backfilling on S side of
 BY over demarcation barrier.
 Backfill soil transfer from truck
 to wheelbarrow to BY.

1200 - RWC takes lunch break.

1230 - RWC continues backfill work.

1320 - RWC compacting backfill with
 vibratory compactor.

1330 - START at **Non-Responsive** to take
 pictures of renovated property.

1440 - START Pallardy off site.

*Backnote, RWC scraped soil out from under
 BY stairs + placed gravel backfill. *Site in the back*

5-9-18

Pilsen 002 RV

1300 - START Pallardy on site. GHD (1),
+ RW Collins (RWC) (5) on site.

1305 - Weather 77°F, high of 80°F, wind
SSW 20 mph, mostly cloudy,
40% chance of rain + storms at 1500.

1315 - Backfill complete on S side of BY.
Soil stockpile removed on N side
+ excavation on N side to 1ft bgs
completed by RWC. Demarcation
barrier placed at excavation
bottom.

1320 - Area around tree excavated as
close as possible to 1ft bgs.
RWC begins backfill on N side of
BY. Utilizing truck to wheelbarrow
transfer.

1415 - RWC compacting S side backfill +
continue backfilling N side BY
excavation.

1425 - RWC compacting N side backfill.

1430 - RWC demo bing for day, placing
caution tape around N side excavation
(backfilling 50% complete). RWC to
excavate FY soil area + garden tomorrow with
VAC truck confirmed by GHD.

1445 - START Pallardy off site.

5-11-2018

Pilsen 002 RV

1230 - START (NGUYEN) on site — AN
Weather - High 57°F, 20% chance rain, 15-25 mph wind

1230 - RW Collins (RWC) (5) + GHD (1)

on site **Non-Responsive** — AN

1235 - GHD + RWC speak with home owner
about an additional electrical line
that was improperly installed — AN

1300 - RWC temporarily fixes electrical
wire + power resumes at the house

1305 - RWC continues to remove soil
to 12" bgs — AN

1307 - Rain begins — AN

1325 - RW Collins salvaging lava rocks
to re-use for site restoration by
request of home owner + approval
of OSC Mendoza — AN

1330 - RWC removes as much soil as
possible around trees — AN

1340 - START offsite — AN

5-11-2018

5-14-18

Pilsen OLRV

* Notes from ~~START~~ Baker transcribed by START Pallardy0900 - START Baker on site at **Non-Responsive**

0910 - Weather 61°F cloudy wind SE 8 mph, chance of storm

0930 - RW Collins (RWC) working on backfilling
in the front yard + front yard garden areas.

0950 - RWC utilizing a compactor for backfill.

1005 - START Baker off site. ————

Collins
5-17-18

5-17-18

Pilsen OLRV

1040 - START Pallardy + EPA OSC Mendoza
at **Non-Responsive** ————1045 - RW Collins placed demarcation
barrier (orange fence) at the bottom
of the front yard area excavation1050 - Weather 68°F mostly sunny, wind 5
mph NE no chance of precipitation1055 - START Pallardy + EPA OSC Mendoza
off-site. ————

Collins
5-17-18

5-22-18

Pilsen Old RV

1005- START Pallardu + EPA OSC Mendoza
at **Non-Responsive** for XRF screening.

1010- START calibrating + standardizing
XRF unit.

1020- Weather GOOD mostly cloudy,
wind ENE 7mph, no chance of precip.

1025- GHD collecting a 3pt comp. of soil 0-6" bgs.
from the BY (this was under a concrete
barrier removed by the owner) INSC-001

XRF Screen	a	b	c	d	e	Avg
Lead (ppm)	1437	1278	1463	1640	1605	1485
Error (+/-)	11	11	12	13	13	12

1040- GHD collected INSC-002, 3pt comp 0-6" bgs.
from BY garden.

XRF Screen	a	b	c	d	e	Avg
Lead (ppm)	1110	1180	1040	1118	1071	1107
Error (+/-)	9	10	8	9	9	9

1050- GHD collected INSC-003, 3pt comp 0-6" bgs
in W side garden area.

XRF Screen	a	b	c	d	e	Avg
Lead (ppm)	1593	1602	1685	1581	1394	1551
Error (+/-)	12	12	12	11	10	11

1100- GHD collects INSC-004, 3pt comp 0-6" bgs
in E side garden area.

5-22-18

Pilsen Old RV

1100 cont-

XRF Screen	a	b	c	d	e	Avg
Lead (ppm)	2435	2610	2800	2830	2660	2668
Error (+/-)	16	17	17	17	17	17

1115- GHD collects INSC-005 2pt comp
0-6" bgs in FY soil area (under concrete
front entrance landing elevated)

XRF Screen	a	b	c	d	e	Avg
Lead (ppm)	1191	1102	1016	1186	1178	1135
Error (+/-)	9	9	8	9	9	9

1130- GHD collects INSC-006, 3pt comp
0-12" bgs in FY garden area.

XRF Screen	a	b	c	d	e	Avg
Lead (ppm)	1982	1643	1630	1481	1598	1671
Error (+/-)	14	12	12	11	12	12

1140- A sketch of comp. pts in yard areas
was completed separately from the log book

1145- No samples collected due to XRF
screening indicating elevated lead concentration

1154- START + EPA OSC at **Non-Responsive**

RW Collins continuing removal work in BY.

1156- START Pallardu + EPA OSC Mendoza off site

~~5-22-18~~

5-25-18

Pilsen OUL RV
EPA OSC0915- START Pallardy + EPA OSC Mendoza on site
at **Non-Responsive**.0900 - Weather 77°F partly cloudy, wind
7 mph SSW, no chance of precip.

0930 - Assessing property for XRF screening.

0935 - START + EPA OSC off site.

1250 - START + EPA OSC at **Non-Responsive**.

RWC Collins backfilling BY with pea gravel.

1310 - START, EPA OSC, + GHD at **Non-Responsive**
for XRF screening. START calibrating
+ standardizing XRF.1320 - GHD collecting 5pt comp 0-6" from BY
grass for XRF screening (INSC001).

1330 XRF screen	a	b	c	d	e	Avg
Lead (ppm)	1261	1102	1226	1122	1797	1,302
Error (%)	11	10	11	10	13	11

1335 - No sample collected due to elevated readings.

1340 - START, EPA OSC + GHD at **Non-Responsive**

RWC completed backfill work.

1345 - START + EPA OSC off-site.

5-25-18

5-31-18

Pilsen OUL RV

1350 - START Pallardy and EPA OSC
Mendoza on site at **Non-Responsive**.1352 - RWC Collins working on backfilling
in BY.

1356 - START Pallardy + EPA OSC off-site.

5-31-18

6-4-18

Pilsen Old RV

1255 - START Pallardy + EPA OSC Mendoza
on site at **Non-Responsive**.

1300 - Weather 79°F sunny, wind WNW 11 mph,
0% chance of precip. ————

1305 - RW Collins conducting removal work
in the FY garden + soil areas. RWC
began placing demarcation barrier
(orange snow fence) in the bottom of
the excavations. ————

1310 - START Pallardy + EPA OSC Mendoza
off site. ————

[Signature]
6-4-18

6-6-18

Pilsen Old RV

1230 - START Pallardy + EPA OSC Mendoza
on site at **Non-Responsive**.

1235 - Weather 72°F cloudy, wind ESE 6 mph.
Slight chance of rain. ————

1240 - RW Collins utilizing conveyor
belts to transfer backfill soil to
the FY areas for grading + compacting.

1241 - START Pallardy + EPA OSC Mendoza
off site. ————

[Signature]
6-6-18

6-8-18

Aisen Old RV

0808- START Pallardy + EPA OSC Mendoza
on site at **Non-Responsive**

0812- RW Collins excavating soil
in soil strip along property wall.
0825- START Pallardy + EPA OSC Mendoza
off site.

[Handwritten signature]
6-8-18
6-8-18

6-11-18

Pilsen Old RV

Non-Responsive

1245- START Pallardy on site at
1255- RW Collins conducting excavation
work in BG utilizing a vac
truck + hose to collect excavated
soil.

1400- RWC + GMD begin demobe for day.
Weather 66°F, cloudy, wind ENE 14 mph.
1405- START Pallardy off site.

[Handwritten signature]
6-11-18
6-11-18

6-12-18

Pilsen Old RV

1020 - START Pallardy onsite at **Non-Responsive**

1025 - RW Collins placed orange demarcation fence in the bottom of the excavation.

RWC is utilizing conveyor belts to backfill in BY over demarcation fence.

1030 - Weather 74°F hazy, wind E 5 mph

1040 - RWC utilizing a compactor to compact backfill soil in BY.

1045 - START at **Non-Responsive** takes photo of property prior to removal work.1115 - ~~START~~ RWC continues backfill of **Non-Responsive** BY.

1145 - RWC takes lunch.

1215 - RWC continues backfill work.

1310 - RWC utilizing compactor.

1315 - START Pallardy off site.

[Signature]
6-12-18

6-13-18

Pilsen Old RV

1120 - START Pallardy onsite at **Non-Responsive**

1125 - Weather 77°F, wind NW 16 mph, cloudy.

1130 - Restoration work complete in BY of **Non-Responsive** with soil placement.1137 - START Pallardy at **Non-Responsive**

1140 - RW Collins prepping for removal work.

1210 - RWC takes lunch.

1240 - RWC continues prep for removal work.

1305 - RWC begins excavating in the BY of **Non-Responsive** RWC stock piling soil for vac truck removal tomorrow.

1320 - Excavation work continues.

1350 - RWC begins demo activities.

1400 - START Pallardy off site.

[Signature]
6-13-18

6-14-18

Pilsen Old RV

1150 - START Pallardy on site at **Non-Responsive**

1155 - Weather 80°F partly cloudy, wind W 3 mph

1200 - RW Collins conducting removal work in the BY of **Non-Responsive** with vac truck + vac truck hose.
PWC on lunch.

1205 - PWC continuing removal work in BY.

1300 - Removal work in BY continues to 1 ft bgs.

1405 - PWC placing orange demarcation fence in bottom of completed BY excavation complete.

1415 - PWC placed caution tape around BY excavation.

1430 - PWC demobbing for day.

1445 - PWC off site to H. Kramer lot.

1455 - START Pallardy off site.

6-14-18

6-15-18

Pilsen Old RV

*Notes from START Kue, transcribed by START Pallardy

0745 - START Kue arrives at **Non-Responsive**

St. Meets with RW Collins + CHD about scope for day. Will be backfilling today using conveyor belt to get soil to BY. Currently waiting for truck with soil.

0750 - Weather High of 84°F, partly cloudy, wind 6 mph S.

0830 - Truck arrives with backfill soil, ERS backfilling BY.

0900 - PWC + CHD break.

0925 - ^{START} Kue off-site.

6-14-18

6-18-18

Pilson Old RV

~~0600-START~~ Notes from START Kuc, ~~transcribed~~
transcribed by START Pallardy.

0800-START Kuc arrives at **Non-Responsive**

Meet with RW Collins & GH and discuss
scope of work - waiting for utility locate
to clear property before starting. Will excavate
to 1 foot except in 3x16' garden along E fence
which will be excavated to 2 feet.

0810-Weather, high of 92°F, mostly sunny,
wind WSW 12 mph.

0915-Will begin excavation at south edge of property.
Fence between **Non-Responsive** was removed.

1332 W/gh will also be excavated. Utility locate
was called in over a week ago & was not located.
Called in emergency locate. Should arrive by
0930 - otherwise RWC to begin without locate.

Pavers on west side will be left in place.

0935 had meeting to plan excavation at
Non-Responsive Resident has pavers in BY
as well as patio furniture & couches. Resident
was told to clear BY but hasn't. Plan will be to
move furniture onto pavers while excavating.

Pavers will be staying.

0933-Utility locate hasn't arrived. RWC decided
to start excavating anyway.

0954-START Kuc off site.

6-19-18

Pilson Old RV

1155-START Pallardy on site at **Non-Responsive**

1200-RWC Collins conducting excavation
work to 1 ft bgs utilizing a skid steer
& an excavator. Skid steer stock
piles ~~soil~~ excavated loads truck.

1210-Weather partly cloudy 78°F,
wind 8 mph ENE.

1300-RWC utilizing excavator to
remove vegetation along the
E side of the **Non-Responsive** parking
area.

1330-RWC placing caution tape around
the **Non-Responsive** excavation in
the BY completed to 1 ft bgs.

1340-RWC compacting backfill soil in
the BY of **Non-Responsive**.

1400-RWC demobing for day.

1425-RWC to H. Ieromer lot, START
Pallardy off site.

[Signature] 6-19-18

6-20-18

Pilsen Old RV

- 0830- START Pallardy on site.
- 0840- RWC Collins utilizing skid steer to grade and remove additional soil from **Non-Responsive** RWC utilizing excavator to load trucks. W side of excavation caught on top of off along walkway.
- 0850- Weather 70°F cloudy, wind W 3mph
- 0930- Excavation in **Non-Responsive** yard and garden area complete.
- 0945- RWC begins placing orange demarcation barrier fence in the bottom of the excavation of **Non-Responsive**
- 1030- RWC placed orange demarcation fence in the bottom of the **Non-Responsive** BY excavation.
- 1040- RWC utilizing survey equipment to confirm excavation depths on N side of **Non-Responsive**
- 1100- START Pallardy off site.

6-20-18

6-25-18

Pilsen Old RV

- *Notes from START Baker transcribed by START Pallardy
- 0730- START Baker on site at **Non-Responsive**
- 0740- RWC Collins backfilling the **Non-Responsive** st. property from N to S.
- 0750- Weather 63°F mostly cloudy wind E 3mph
- 0900- Backfill work continues.
- 1000- START Baker off site, backfill work by RWC continues.



6-26-18

Pilsen Out RV

*Notes from START Baker transcribed by START Pallardy

0730-START Baker on site at Non-Responsive

0740-RW Collins continues backfill work.
Utilizing skid steer to grade backfill.0750-Weather 69°F cloudy, wind SE 9mph,
chance for rain.0800-RW Collins begins to repair portion
of fence between Non-Responsive
St yards.0850-RW Collins utilizing compactor to
compact backfill soil.0950-RWC continues grading, compacting
& backfill activities.

1000-START Baker off site.

7-9-18

6-27-18

Pilsen Out RV

*Notes from START Baker transcribed by START Pallardy

0730-START Baker on site.

0740-RW Collins prepping to place sod
in yard area of Non-Responsive

0750-Weather 71°F cloudy, wind WNW 10mph.

0800-RWC places sod in the BY of
1332 W 19th St.0805-RWC begins placing sod from S
to N in the yard area of Non-Responsive

Sod placement in BY of Non-Responsive complete

0810-RWC repairing alley guard rail
N of Non-Responsive removed
for access.

0915-Sod placement continues.

1000-START Baker off site. RWC continues
sod placement.

7-9-18

6-28-18

Pilsen Old Rv

*Notes from START Baker transcribed by START Pallard
 0730-START Baker on site.

0740-RWC continues sod placement in
 yard area of **Non-Responsive**

0750-Weather 74°F mostly sunny, wind 3 mph E.

0805-RWC placing Sod S to N in yard area.
 Fence repaired between **Non-Responsive**
Non-Responsive

0930-RWC continues soil grading &
 sod placement.

1000-START Baker off site, sod placement
 work continues.

[Signature] 7-9-18

6-29-18

Pilsen Old Rv

*Notes from START Baker transcribed by START Pallard
 0730-START Baker on site.

0740-RWC Collins beginning excavation
 work in the BY of **Non-Responsive**

0750-Weather 74°F partly cloudy, wind 12 mph SE

0830-Removal work starting from
 S to N in BY.

0900-RWC utilizing a vac truck for
 removal work.

0930-BY removal work continues.

1000-START Baker off site. RWC
 continues removal work.

[Signature] 7-9-18

7-2-18

Pilsen Old RV

*Notes from START Blake transcribed by START Pallard

0755-START Blake on site at **Non-Responsive**0800-RWC haul excavating BY to backfill and
sod following excavation.0815-Excavation to 1ft bgs complete, RWC
laying orange construction fence in excavation bottom.0910-Truck w/backfill on site, dumps in yard
crews begin spreading by shovel + mini track loader.0935-Gluing PVC Pipe for drain, will cut to
grade after sodding is completed.

0945-2nd truck of backfill on site (topsoil).

1005-3rd truck of backfill on site.

1015-RWC placing + compacting backfill in 6" lifts.

1030-Truck on site to dump backfill.

1050-Truck on site to dump backfill, compacting 1st lift.

1110-Truck on site to dump backfill.

1145-Truck on site w/backfill, crews break for lunch.

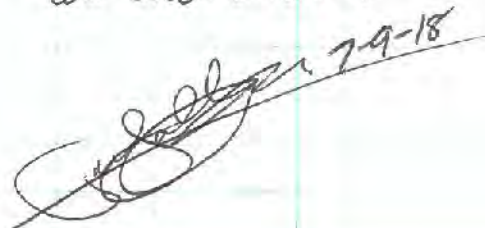
1215-Crews resume working using laser level to
set grade, will slope yard towards drain
center.1245-Out of dirt at SA, waiting for delivery of more
topsoil to finish backfilling, scheduled at 1330.

1340-EPA OSC Mendoza on site.

1355-**Non-Responsive** still has a lot of

7-2-18

Pilsen Old RV

1355 cont. - items (bench, chairs, reclined) in
BY excavation area.**Non-Responsive** side lot has patches
of brown sod near rear of lot, owner
stated they watered twice a day.
1405-EPA OSC recommends checking
health + safety on excavating yard
w/cat litter, provides input on
excavating in stages to avoid clutter,
removal depth to 6" in hard to access
areas due to health + safety + deck
foundations.1420-Crew will finish backfill of
Non-Responsive today. START
+ EPA OSC Mendoza off site.
START will contact health +
safety for tips on excavating
yard with high amounts of
cat excrement.

 7-9-18

7-3-18

~~0800~~ Notes from START Blake transcribed by START Pallady.

0800-START Blake on site at **Non-Responsive**

excavation + vac-truck crew on site.

Weather 76°F (high 84°F) sunny, 50%
chance of rain, 2mph NNW wind, 72% humidity

0815-Backfill of **Non-Responsive** was

completed yesterday, sodding still
remains to be finished.

0800-START contacted Tetra Tech health + safety
for input on excavation of **Non-Responsive** due

to high levels of cat feces in soil. No additional
respiratory protection or PPE is needed above those
to meet lead soil removal. Recommended to

wear gloves + booties + thoroughly wash hands +
face before eating, drinking, or applying sunscreen.

0830-Resident is asking to hold off on excavating
because she is not wanting it done unless
everything is moved to allow access to excavate
entire yard, she is trying to contact someone
to move items out of the way, crack note
in front of chalk oven.

0840-Resident says to begin excavation, she
will have someone move log pile, crew
will work around log pile for now.

7-3-18

0845-Crews begin removing brickpavers
in center of yard that are no longer properly sealed,
allowing gaps to the soil.

0930-Residents moving crew on site to move
Hernson out of the yard. Stop excavation activities
due to safety reasons, remove rebar, old piping,
wooden table - move lawn chair, grill, dollhouse, etc.

0945-Residents moving crew off site, continue
excavation, remind residents she cannot enter
excavation area while work is going.

1115-Excavation over gas line will be limited to 6"
excavation beneath porch will be limited to
6" along the side of the house due to site access
restraints center of yard excavated to 12"

* Backnote - EPA OSC Mendoza on site around 10:00

1130-Crew breaks for lunch, START, EPA + GHD discuss
plan for remainder of yard, will pull pavers along
fence and use as fill in 12" excavation, place
orange barrier fence, then gravel, take care
excavating around footers for porch due to unknown depth.

1145-Meet with owner of **Non-Responsive** Owner told to
continue watering + increase frequency.

1155-EPA OSC Mendoza + START Blake
off site.

Pilsen OUT RV

7-5-18

*Notes from START Blake transcribed by START Pallardy.

0830-START on site at Non-Responsive Weather

83°F, high 89°F, 80% chance of rain, sunny,
calm, 70% humidity.0835-RWC backfilling with gravel,
using wheel barrow to haul in gravel,
accessing from rear yard of Non-Responsive0925-XRF delivered to site for screening
of Non-Responsive(Notes on screening + sampling of Non-Responsive
Non-Responsive in separate log book)1100-RWC compacting gravel after
installing first lift.1130-Water spicket is not hooked up
yet at Non-Responsive so sod
install will be moved to Monday.

1200-START off site.

*Backnote - no removal work yesterday
in observation of the 4th of July. 7-9-18

Pilsen OUT RV

7-6-18

*Notes from START Blake transcribed by START Pallardy.

0715-START on site at Non-Responsive Weather

74°F, sunny, 0% chance of rain, Traph W. Wind,
61% humidity.0725-Setting up conveyor to load gravel
backfill into wheel barrows to haul
to the site, accessing Non-Responsive
BY through Non-Responsive BY.0800-Truck on site w/gravel to continue
backfilling beneath porch, along side
of the house.0900-Patches of dying sod in side
lot of Non-Responsive appear to be
greening up after resident has started
watering those areas more frequently.

0915-Compacting final layer of gravel backfill.

0955-EPA OSC Mendoza on site at Non-Responsive

1000-Beg in cleaning BY of Non-Responsive sawing
tires + pavers and storing on patio, removing
fabric weed barrier.

1030-Uncovered drain in center of yard of Non-Responsive

Non-Responsive - was previously covered by soil + pavers.

1040-START off site.

7-9-18

7-9-18

Pilsen Old RV

1250- START Pallardy on site at **Non-Responsive**

1300- RWC Collins prepping the BY of the property for removal work.

1305- weather 88°F mostly sunny, wind W 7mph, no chance of rain.

1315- RWC building a ramp for access to the BY of the property with a dingo or mini stud steer. ————

1320- patio area on NW side of BY is under renovation, new concrete pad to be placed. ————

1330- START at **Non-Responsive**

Sod placement complete, RWC watering sod. ————

1340- START back at **Non-Responsive**, RWC continues prep work. ————

1400- RWC demobbing for day. ————

1445- RWC to H. Kramer lot, START Pallardy off site. ————

[Signature] 7-9-18

7-10-18

Pilsen Old RV

1130- START Pallardy on site at **Non-Responsive**1145- RWC Collins conducting removal work in BY of **Non-Responsive** by hand + with the dingo, dingo stock piling soil near vac truck hose for collection.

1150- RWC sloping excavation grade from patio to prevent damage.

1200- weather 84°F mostly cloudy, wind NE 10mph, no chance of rain.

1215- RWC utilizing dingo in garden area on S side of BY. ————

1230- RWC breaks for lunch. ————

1250- RWC continues removal work.

1410- Garden excavation on S side of BY complete. ————

1430- RWC begins placing orange demarcation barrier in the bottom of the excavation. START Pallardy off site.

[Signature] 7-10-18

7-11-18

Pilsen Old RV

1220-START Pallardy on site. —

1225-RWC Collins placing backfill soil
over orange demarcation barrier
in the bottom of the **Non-Responsive**
BY excavation. —1230-RWC utilizing the mini skid steer
to grade backfill soil. —1235-RWC direct dumping backfill
soil in the BY. —1240-Weather 86°F partly cloudy wind
NNW 6mph. —

1330-Backfill operations continue. —

1430-RWC utilizing compactor to
compact backfill soil. —1505-Backfill complete, RWC demob'ing
mini skid steer. Constructing ramp
to move it out of the BY. —

1510-Mini skid steer out of BY. —

1515-RWC demob'ing. Will complete
backfill grading + compaction tomorrow
+ then will place sod to complete. **Non-Responsive****Non-Responsive***Backnote RWC placed + compacted
gravel around new concrete patio. —

1525-START Pallardy off site. —

C. J. [Signature] 7-11-18

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION LOG

Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors conducting soil removal work in the back yard soil area of the Non-Responsive property.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:



Description: EPA and START confirm depth of excavation is 1 foot bgs in the back yard soil area of the Non-Responsive Street property.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:

Tags:



Description: Orange snow fencing placed in the bottom of the excavation in the back yard soil area of the Non-Responsive property.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:

Tags:



Description: The excavated back yard soil area of the Non-Responsive St property was backfilled with CA6 gravel by RP contractors as a 1-foot engineered barrier.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors conducting soil removal work in the raised front yard garden area of the **Non-Responsive** property.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:

Tags:



Description: EPA discusses removal work in the Pilsen neighborhood area of Chicago, IL with a reporter from the Chicago Tribune.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:

Tags:



Description: EPA and START confirm depth of excavation is in the raised front yard garden area of the **Non-Responsive** property. Excavation depth was to the concrete pad at the bottom of the raised front yard garden area.

Category: Site Photo

Latitude:

Date Taken: 12/20/2016

Longitude:

Tags:



Description: The raised front yard garden area of the **Non-Responsive** property was backfilled with topsoil tested by the RP contractor and approved for use by EPA.

Category: Site Photo

Latitude:

Category:

12/20/2016

Longitude:

Date Taken:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors conducting soil removal work with mini excavator in the soil area behind the garage of the **Non-Responsive** property.

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Description: EPA and START confirm depth of excavation is 1 foot bgs in the soil area behind the garage of the **Non-Responsive** property.

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Description: Orange snow fencing placed in the bottom of the soil remaining in the excavation in the soil area behind the garage of the **Non-Responsive** property.

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Description: The excavated soil area behind the garage of the **Non-Responsive** property was backfilled with CA6 gravel by RP contractors as a 1-foot engineered barrier.

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors scrapped back shallow 3-inch gravel cover to soil with mini excavator in the gravel driveway area of the **Non-Responsive**

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Description: RP contractors placing additional CA6 gravel in the gravel driveway area of the **Non-Responsive** property to add additional gravel cover to the shallow 3-inch gravel cover area.

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Description: RP contractors grading additional CA6 gravel placed in the gravel driveway area of the **Non-Responsive** property to add additional gravel cover to the shallow 3-inch gravel cover area.

Category: Site Photo

Latitude:

Date Taken: 12/21/2016

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating contaminated soil from the back yard garden of 2006 South Throop Street.

Category: Site Photo

Latitude:

Date Taken: 4/24/2017

Longitude:



Description: RP contractors replacing soil in excavated back yard garden of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 4/24/2017

Longitude:



Description: RP contractors transporting excavated soil to staging area.

Category: Site Photo

Latitude:

Date Taken: 4/25/2017

Longitude:

Tags:



Description: RP contractors excavating lead contaminated soil in the front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 4/25/2017

Longitude:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating soil from front yard of **Non-Responsive** using shovels and rototiller.

Category: Site Photo

Latitude:

Date Taken: 4/25/2017

Longitude:

Tags:



Description: RP contractors laying plastic tarp to prevent rain from soaking into the ground of the front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 4/27/2017

Longitude:

Tags:



Description: RP contractors filling in the front yard excavation with clean soil at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/2/2017

Longitude:

Tags:



Description: Photo of completed restoration work by RP contractors at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/5/2017

Longitude:

Tags:



Description: RP contractors laying sod at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/5/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating soil from front yard garden of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/8/2017

Longitude:

Tags:



Description: RP contractors excavating soil from front yard soil strip of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/8/2017

Longitude:

Tags:



Description: Excavated front yard soil strip of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/8/2017

Longitude:

Tags:



Description: Gravel backfilled and compacted in a former soil strip area of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/8/2017

Longitude:

Tags:



Description: Gravel backfilled and compacted in a former soil strip area of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/9/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Demarcation barrier placed at Non-Responsive in the excavation to the east of the garage looking northwest

Category: Site Photo

Latitude:

Date Taken: 5/16/2017

Longitude:

Tags:



Description: View of completed restoration in the garden to the east of the retaining wall in the back yard of Non-Responsive looking southwest.

Category: Site Photo

Latitude:

Date Taken: 5/17/2017

Longitude:

Tags:



Description: View of completed backfill to the east of the garage at Non-Responsive looking north.

Category: Site Photo

Latitude:

Date Taken: 5/17/2017

Longitude:

Tags:



Description: View of the RP contractor hand excavating on the north side of the back yard at Non-Responsive in the vicinity of an electrical line and utilizing a rototiller on the east side of the back yard at Non-Responsive looking northeast .

Category: Site Photo

Latitude:

Date Taken: 5/18/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of the RP Contractor utilizing the vac truck to vacuum soil broken up by hand in the back yard of **Non-Responsive** looking northeast

Category: Site Photo

Latitude:

Date Taken: 5/18/2017

Longitude:

Tags:



Description: View of vac truck dumping vacuumed excavated soil from **Non-Responsive** in the staging area. The RP contractor utilizing a skid steer to place excavated material in a roll off box for transportation off site looking northeast

Category: Site Photo

Latitude:

Date Taken: 5/18/2017

Longitude:

Tags:



Description: View of confirmation of 1 foot bgs excavation depth in the back yard of **Non-Responsive**

Category: Site Photo

Latitude:

Date Taken: 5/21/2017

Longitude:

Tags:



Description: RP contractors backfilling the 2 feet bgs excavation in the garden area on the southern half of the back yard of the **Non-Responsive** property with rough clean soil backfill looking west.

Category: Site Photo

Latitude:

Date Taken: 5/24/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Completed Yard at Non-Responsive looking south.
Owner requested half for gardening and other mulch.

Category: Site Photo

Latitude:

Date Taken: 5/26/2017

Longitude:

Tags:



Description: RP contractors conducting hand excavation with the assistance of a vac truck in the back yard of the Non-Responsive looking northeast.

Category: Site Photo

Latitude:

Date Taken: 5/30/2017

Longitude:

Tags:



Description: RP contractors backfilling the excavation using a conveyor belt in a yard at Non-Responsive, looking north.

Category: Site Photo

Latitude:

Date Taken: 6/1/2017

Longitude:

Tags:



Description: Completed yard with fresh sod at Non-Responsive Non-Responsive, looking north.

Category: Site Photo

Latitude:

Date Taken: 6/2/2017

Longitude:

Tags:

Non-Responsive

Non-Responsive



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Excavation of Lead contaminated soil using a vac truck in the back yard at **Non-Responsive**.

Category: Site Photo Latitude:

Date Taken: 6/6/2017 Longitude:



Description: Backfilling the back yard at **Non-Responsive** with gravel.

Category: Site Photo Latitude:

Date Taken: 6/8/2017 Longitude:

Tags:



Description: Backfill operations on a sunken yard of **Non-Responsive** using conveyor belts.

Category: Site Photo Latitude:

Date Taken: 6/15/2017 Longitude:

Tags:



Description: RP contractors excavating in the back yard of **Non-Responsive** using shovels and a vac truck hose.

Category: Site Photo Latitude:

Date Taken: 6/19/2017 Longitude:

Tags:



Description: Completed back yard and garden of **Non-Responsive**.

Category: Site Photo Latitude:

Date Taken: 6/22/2017 Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors backfilling with clean soil in garden and back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/22/2017

Longitude:

Tags:



Description: RP contractors watering new sod installed in back yard of **Non-Responsive**

Category: Site Photo

Latitude:

Date Taken: 6/29/2017

Longitude:

Tags:



Description: Excavated garden in the back yard at **Non-Responsive**

Non-Responsive

Category: Site Photo

Latitude:

Date Taken: 6/30/2017

Longitude:

Tags:



Description: Vac truck set up to suck up lead contaminated soil on Cullerton Street

Category: Site Photo

Latitude:

Date Taken: 7/6/2017

Longitude:

Tags:



Description: RP contractors backfilling excavated back yard with gravel at **Non-Responsive** per owner request

Category: Site Photo

Latitude:

Date Taken: 7/13/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating lead contaminated soil from the back yard at **Non-Responsive**. Soil was fed into a vacuum hose to a vac truck.

Category: Site Photo

Latitude:

Date Taken: 7/17/2017

Longitude:

Tags:



Description: RP contractors excavating the back yard of **Non-Responsive** using shovels and vac truck hose.

Category: Site Photo

Latitude:

Date Taken: 7/21/2017

Longitude:

Tags:



Description: RP contractors excavating lead contaminated soil at back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/25/2017

Longitude:

Tags:



Description: RP contractors placing new sod in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/27/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors backfilling with clean soil at back yard of **Non-Responsive** **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 8/2/2017

Longitude:



Description: Back yard of **Non-Responsive** halfway backfilled with clean soil.

Category: Site Photo

Latitude:

Date Taken: 8/3/2017

Longitude:

Tags:



Description: RP contractors backfilling excavation at **Non-Responsive** with clean gravel per request of owner.

Category: Site Photo

Latitude:

Date Taken: 8/7/2017

Longitude:

Tags:



Description: Completed back yard at **Non-Responsive** backfilled with clean gravel.

Category: Site Photo

Latitude:

Date Taken: 8/9/2017

Longitude:

Tags:



Description: RP contractors excavating at **Non-Responsive** shoveling into a vac truck hose.

Category: Site Photo

Latitude:

Date Taken: 8/11/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Conveyor belt for backfilling back yard of **Non-Responsive**. Soil was unloaded by RP Contractors from a dump truck.

Category: Site Photo

Date Taken: 8/11/2017



Description: RP contractors laying down clean soil and sod in the back yard of **Non-Responsive**

Category: Site Photo

Latitude:

Date Taken: 8/14/2017

Longitude:

Tags:



Description: Completed back yard at **Non-Responsive** with new sod and new garden.

Category: Site Photo

Latitude:

Date Taken: 8/17/2017

Longitude:

Tags:



Description: Excavated back yard at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 8/17/2017

Longitude:

Tags:



Description: Completed back yard at **Non-Responsive** **Non-Responsive**. Excavation backfilled with gravel per owner

Category: Site Photo

Latitude:

Date Taken: 8/18/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating back yard at **Non-Responsive**.
Shovels were used to transfer soil to a vac truck hose.

Category: Site Photo

Date Taken: 9/1/2017



Description: RP contractors backfilling clean gravel under porch at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 9/6/2017

Longitude:

Tags:



Description: Front yard **Non-Responsive** restored with clean soil and sod by RP contractors.

Category: Site Photo

Latitude:

Date Taken: 9/8/2017

Longitude:

Tags:



Description: Excavation in the back yard of **Non-Responsive** ready to be backfilled using conveyor belt and wheelbarrows.

Category: Site Photo

Latitude:

Date Taken: 9/12/2017

Longitude:

Tags:



Description: Excavation complete in back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 9/20/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Completed excavation and restoration of the back yard of [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 9/20/2017

Longitude:

Tags:



Description: RP contractors excavating the front yard of [Non-Responsive]

Category: Site Photo

Latitude:

Date Taken: 10/3/2017

Longitude:

Tags:



Description: View of the front yard excavation of [Non-Responsive] [Non-Responsive]

Category: Site Photo

Latitude:

Date Taken: 10/3/2017

Longitude:

Tags:



Description: RP contractors excavating the front yard of [Non-Responsive] [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 10/3/2017

Longitude:

Tags:



Description: RP contractors completing clean soil backfill in the back yard of [Non-Responsive] [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 10/6/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Completed excavation and restoration of the back yard of **Non-Responsive** **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 10/9/2017

Longitude:

Tags:



Description: Completed restoration in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 10/11/2017

Longitude:

Tags:



Description: RP Contractors compacting clean backfill at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 10/17/2017

Longitude:

Tags:



Description: Completed restoration of the front yard and garden of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 10/18/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 10/25/2017

Longitude:

Tags:



Description: RP contractors excavating the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 10/25/2017

Longitude:

Tags:



Description: Excavation progress in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 10/25/2017

Longitude:

Tags:



Description: Overview of START conducting XRF screening in the front yard excavation area of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 10/30/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Overview of the completed front yard and garden area excavation of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 10/30/2017

Longitude:

Tags:



Description: View of the completed backfill with clean soil in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 11/2/2017

Longitude:

Tags:



Description: View of the completed restoration with sod in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 11/2/2017

Longitude:

Tags:



Description: View of the restored garden area in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 11/2/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors backfilling the front yard of **Non-Responsive** with clean soil utilizing conveyor belts.

Category: Site Photo

Latitude:

Date Taken: 11/3/2017

Longitude:

Tags:



Description: RP contractor compacting backfill in the front yard of **Non-Responsive** during restoration work. A vibratory plate compactor was utilized.

Category: Site Photo

Latitude:

Date Taken: 11/3/2017

Longitude:

Tags:



Description: RP contractor placing sod during restoration work in the front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 11/3/2017

Longitude:

Tags:



Description: View of completed restoration work in the front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 11/3/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of demarcation barrier placed at the bottom of the excavated front yard area of [Non-Responsive] prior to backfill work.

Category: Site Photo

Latitude:

Date Taken: 11/6/2017

Longitude:

Tags:



Description: RP contractor backfilling the excavated back yard area of [Non-Responsive] under a deck with gravel.

Category: Site Photo

Latitude:

Date Taken: 11/8/2017

Longitude:

Tags:



Description: Completed excavation of the back yard garden area of [Non-Responsive]

Category: Site Photo

Latitude:

Date Taken: 11/9/2017

Longitude:

Tags:



Description: Completed restoration of the back yard garden area of [Non-Responsive]. The area was restored with river rock.

Category:

Site Photo

Latitude:

Date Taken:

11/14/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors conducting excavation work in the side yard and garden area of **Non-Responsive**. Soil was transferred to a vac truck hose with shovels.

Category: Site Photo

Latitude:

Date Taken: 11/15/2017

Longitude:

Tags:



Description: RP contractor utilizing a subcontracted vac truck to collect excavated soil during removal work in the side yard and garden area of **Non-Responsive**. Soil was transferred to the vac truck hose with shovels.

Category: Site Photo

Latitude:

Date Taken: 11/15/2017

Longitude:

Tags:



Description: RP contractor excavating soil with a mini excavator in the back yard **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 11/22/2017

Longitude:

Tags:



Description: RP contractor utilizing conveyor belts to excavate soil from the back yard of **Non-Responsive** with limited access and space.

Category: Site Photo

Latitude:

Date Taken: 12/7/2017

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractor excavating lead contaminated soil by hand in the back yard of [Non-Responsive] before placing on the conveyor belt which feeds the soil onto a flatbed truck.

Category: Site Photo

Latitude:

Date Taken: 12/7/2017

Longitude:

Tags:



Description: Completed restoration of the front yard of [Non-Responsive] with clean soil overlain with grass seed mat.

Category: Site Photo

Latitude:

Date Taken: 12/20/2017

Longitude:

Tags:



Description: RP contractors utilizing a vac truck hose to excavate soil from the back yard garden area of [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 4/17/2018

Longitude:

Tags:



Description: RP contractor measuring the depth of the back yard garden area excavation of [Non-Responsive]. The measurement indicated 2-foot depth of excavation.

Category: Site Photo

Latitude:

Date Taken: 4/17/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of RP contractor's haul truck with a plastic liner for brick and building debris from excavation work at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 4/17/2018

Longitude:

Tags:



Description: Caution tape placed around the back yard garden excavation area prior to backfill at the **Non-Responsive** Place property.

Category: Site Photo

Latitude:

Date Taken: 4/17/2018

Longitude:

Tags:



Description: RP contractor backfilling over a demarcation barrier in the back yard garden excavation area of the property at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 4/18/2018

Longitude:

Tags:



Description: RP contractors using vac truck to excavate soil from back yard garden at **Non-Responsive**

Category: **Non-Responsive**

Site Photo

Latitude:

Date Taken:

4/19/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of caution tape around the back yard excavation area prior to backfill at Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 4/23/2018

Longitude:

Tags:



Description: View of gravel placed underneath wooden stairs after excavation in the back yard of the property at Non-Responsive Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 4/24/2018

Longitude:

Tags:



Description: RP contractors backfilling and compacting backfill soil after excavation in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 4/24/2018

Longitude:

Tags:



Description: View of completed restoration work following excavation in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 4/25/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors prepping for excavation work with a vac truck in the back yard of [Non-Responsive] [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 4/25/2018

Longitude:

Tags:



Description: RP contractors utilizing a vac truck hose to excavate soil in the back yard of [Non-Responsive] [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 4/25/2018

Longitude:

Tags:



Description: RP contractors conducting excavation work by bucket transfer in the back yard of [Non-Responsive] [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 4/27/2018

Longitude:

Tags:



Description: View of completed excavation work in the back yard garden of [Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 4/27/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors prepped for backfill work in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 4/30/2018

Longitude:

Tags:



Description: RP contractors grading backfill in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 4/30/2018

Longitude:

Tags:



Description: RP contractors grading backfilled soil and placing mulch in garden areas of the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 5/1/2018

Longitude:

Tags:



Description: RP contractors completing restoration work in the back yard garden and grass areas of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 5/1/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of semi-completed backfill work in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 5/1/2018

Longitude:

Tags:



Description: RP contractors prepping to begin backfill work in the back yard of Non-Responsive

Category: Site Photo

Latitude:

Date Taken: 5/1/2018

Longitude:

Tags:



Description: RP contractors grading backfill soil in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 5/2/2018

Longitude:

Tags:



Description: View of completed backfill in the front yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 5/3/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors prepping for sod placement in the back yard of [Non-Responsive]

[Non-Responsive]

Category: Site Photo

Latitude:

Date Taken: 5/3/2018

Longitude:

Tags:



Description: RP contractors placing sod to restore the back yard excavation area [Non-Responsive]

[Non-Responsive]

Category: Site Photo

Latitude:

Date Taken: 5/3/2018

Longitude:

Tags:



Description: View of the restored back yard area of [Non-Responsive].

[Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 5/4/2018

Longitude:

Tags:



Description: View of the restored side yard area of [Non-Responsive].

[Non-Responsive].

Category: Site Photo

Latitude:

Date Taken: 5/4/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors utilizing a truck with plastic liner to transport excavated soil from the front yard of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 5/4/2018

Longitude:

Tags:



Description: View of the front yard soil and garden area excavations of **Non-Responsive** secured with caution tape.

Category: Site Photo

Latitude:

Date Taken: 5/4/2018

Longitude:

Tags:



Description: RP contractors backfilling with clean soil on the south side of the back yard of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 5/8/2018

Longitude:

Tags:



Description: A covered excavated soil stock pile on the north side of the back yard of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 5/8/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: The completed excavation in the back yard of [Non-Responsive] [Non-Responsive] Orange demarcation fence was placed at the bottom of the excavation which can be seen on the north side of the back yard.

Category: Site Photo

Latitude:

Date Taken: 5/9/2018

Longitude:

Tags:



Description: RP contractors compacting backfill in the back yard of a [Non-Responsive] .

Category: Site Photo

Latitude:

Date Taken: 5/9/2018

Longitude:

Tags:



Description: RP contractors excavating in the back yard of [Non-Responsive] .

Category: Site Photo

Latitude:

Date Taken: 5/11/2018

Longitude:

Tags:



Description: View of the completed front yard of [Non-Responsive] . RP contractors laid down clean gravel and soil.

Category: Site Photo

Latitude:

Date Taken: 5/15/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating lead contaminated soil and shoveling into a vac truck hose in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 5/18/2018

Longitude:

Tags:



Description: EPA START and GHD collecting confirmatory soil samples in the back yard of Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 5/22/2018

Longitude:

Tags:



Description: View of the back yard of Non-Responsive prior to excavation work.

Category: Site Photo

Latitude:

Date Taken: 5/22/2018

Longitude:

Tags:



Description: View of the front yard of Non-Responsive Non-Responsive prior to excavation work.

Category: Site Photo

Latitude:

Date Taken: 5/22/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of the completed excavation in the back yard of **Non-Responsive**. Caution tape placed by the crew can be seen around the excavation.

Category: Site Photo

Latitude:

Date Taken: 5/22/2018

Longitude:

Tags:



Description: GHD collecting a composite sample for XRF screening in the back yard of a property located at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/22/2018

Longitude:

Tags:



Description: View of the back yard of **Non-Responsive** prior to excavation work.

Category: Site Photo

Latitude:

Date Taken: 5/25/2018

Longitude:

Tags:



Description: View of the RP contractors conducting utilizing conveyor belts to backfill with gravel in the back yard of **Non-Responsive**.

Category:

Site Photo

Latitude:

Date Taken:

5/25/2018

Tags:

Longitude:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of EPA assisting GHD with collection of a soil sample for XRF screening in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/25/2018

Longitude:

Tags:



Description: View of the completed backfill in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/25/2018

Longitude:

Tags:



Description: Gravel cover placed in the back yard by RP contractors at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 5/31/2018

Longitude:

Tags:



Description: RP contractors excavating the garden in the front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/4/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: Excavated front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/4/2018

Longitude:

Tags:



Description: RP contractor beginning backfill of the front yard garden excavation area of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/4/2018

Longitude:

Tags:



Description: View of the RP contractors backfilling and compacting in the front yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/6/2018

Longitude:

Tags:



Description: RP contractors completed backfill of clean soil and placement of sod and mulch in the Front Yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/7/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors excavating in the side yard area of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/8/2018

Longitude:

Tags:



Description: RP contractors excavating in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/11/2018

Longitude:

Tags:



Description: RP contractors backfilling with clean soil in the back yard of **Non-Responsive**. Orange demarcation fence was placed in the bottom of the excavation prior to backfill.

Category: Site Photo

Latitude:

Date Taken: 6/12/2018

Longitude:

Tags:



Description: View of a property located at **Non-Responsive** prior to excavation work.

Category: Site Photo

Latitude:

Date Taken: 6/12/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of the completed restoration work in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/13/2018

Longitude:

Tags:



Description: RP contractors beginning excavation work in the back yard portion of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/13/2018

Longitude:

Tags:



Description: RP contractors continuing excavation work with a vac truck in the back yard portion of the property located at **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/14/2018

Longitude:

Tags:



Description: View of completed excavation work in the back yard portion of **Non-Responsive**. Orange demarcation fence was placed at the bottom of the excavation.

Category: Site Photo

Latitude:

Date Taken: 6/14/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors backfilling in the back yard portion of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 6/15/2018

Longitude:

Tags:



Description: View of on-going backfill work in the back yard portion of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 6/18/2018

Longitude:

Tags:



Description: RP contractor conducting excavation work utilizing an excavator and skid-steer in the open lot portion of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 6/18/2018

Longitude:

Tags:



Description: RP contractors continuing to conduct excavation work utilizing an excavator and skid-steer in the open lot portion of a property located at Non-Responsive . As well as the back yard of the adjacent property Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 6/19/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors placing caution tape around the excavation in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 6/19/2018

Longitude:

Tags:



Description: View of orange demarcation fence placed at the bottom of the excavation in the open lot portion of Non-Responsive Non-Responsive.

Category: Site Photo

Latitude:

Date Taken: 6/20/2018

Longitude:

Tags:



Description: View of orange demarcation fence placed in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 6/20/2018

Longitude:

Tags:



Description: RP contractors beginning to conduct backfill work with clean soil in the open lot portion of Non-Responsive

Category: Site Photo

Latitude:

Date Taken: 6/25/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors continuing to conduct backfill work with clean soil utilizing a skid-steer in the open lot portion of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 6/25/2018

Longitude:

Tags:



Description: RP contractors repairing the fence taken down for access between the two properties located at **Non-Responsive** and **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 6/26/2018

Longitude:

Tags:



Description: RP contractors placing sod in the open lot portion of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 6/27/2018

Longitude:

Tags:



Description: View of completed sod placement in the back yard of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 6/27/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of completed sod placement in the back yard portion of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/27/2018

Longitude:

Tags:



Description: RP contractors continuing to place sod in the open lot portion of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/28/2018

Longitude:

Tags:



Description: RP contractors conducting excavation work utilizing a vac truck in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 6/29/2018

Longitude:

Tags:



Description: RP contractors placing orange demarcation fence in the bottom of the excavated back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/2/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of backfill soil being placed over top of the orange demarcation fence in the bottom of the excavated back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/2/2018

Longitude:

Tags:



Description: RP contractors compacting backfill soil placed in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/2/2018

Longitude:

Tags:



Description: RP contractors utilizing surveying equipment to check the backfill grade in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/2/2018

Longitude:

Tags:



Description: View of the back yard of the property located **Non-Responsive** prior to excavation.

Category: Site Photo

Latitude:

Date Taken: 7/3/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractors beginning removal work in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/3/2018

Longitude:

Tags:



Description: RP contractors conducting removal work in the back yard of **Non-Responsive** utilizing a vac truck.

Category: Site Photo

Latitude:

Date Taken: 7/3/2018

Longitude:

Tags:



Description: View of orange demarcation fence placed in the bottom of the back yard excavation of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/5/2018

Longitude:

Tags:



Description: View of the back yard of **Non-Responsive** prior to removal work.

Category: Site Photo

Latitude:

Date Taken: 7/5/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of gravel placed and compacted over orange demarcation fence placed in the bottom of the back yard excavation of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/5/2018

Longitude:

Tags:



Description: View of the excavated side yard of the of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/5/2018

Longitude:

Tags:



Description: RP contractors beginning to place orange demarcation fence in the bottom of the excavated side yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/6/2018

Longitude:

Tags:



Description: RP contractors utilizing conveyor belts to transfer gravel to the back yard of **Non-Responsive**. Access was through the adjacent property also scheduled for removal work.

Category: Site Photo

Latitude:

Date Taken: 7/6/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of gravel placed and compacted over orange demarcation fence placed in the bottom of the excavated side yard of **Non-Responsive**.

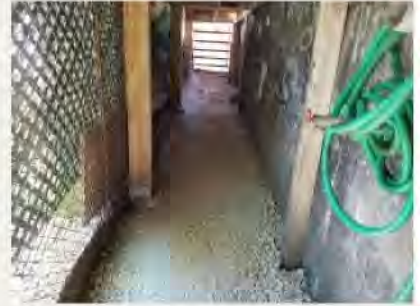
Category: Site Photo

Latitude:

Date Taken: 7/6/2018

Longitude:

Tags:



Description: View of construction work in the back yard of **Non-Responsive** for placement of a concrete patio.

Category: Site Photo

Latitude:

Date Taken: 7/9/2018

Longitude:

Tags:



Description: RP contractors constructing a ramp for the dingo to access the back yard of **Non-Responsive** Street to assist with removal work.

Category: Site Photo

Latitude:

Date Taken: 7/9/2018

Longitude:

Tags:



Description: View of completed restoration with sod placed in the back yard of **Non-Responsive**.

Category: Site Photo

Latitude:

Date Taken: 7/9/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: RP contractor utilizing a dingo to assist with the removal work in the back yard of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 7/10/2018

Longitude:

Tags:



Description: View of completed construction work in the back yard of **Non-Responsive** for placement of a concrete patio.

Category: Site Photo

Latitude:

Date Taken: 7/10/2018

Longitude:

Tags:



Description: RP contractors excavating the garden area in the back yard of **Non-Responsive** Street utilizing a vac truck.

Category: Site Photo

Latitude:

Date Taken: 7/10/2018

Longitude:

Tags:



Description: RP contractors beginning to place orange demarcation fence in the bottom of the excavation in the garden and grass area of the back yard of **Non-Responsive** .

Category: Site Photo

Latitude:

Date Taken: 7/10/2018

Longitude:

Tags:



Pilsen Soil Operable Unit 2 Residential

Photo Log

Description: View of gravel placed and compacted around the new concrete patio in the back yard of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 7/11/2018

Longitude:

Tags:



Description: RP contractor utilizing a dingo to place and compact backfill soil in the back yard grass area of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 7/11/2018

Longitude:

Tags:



Description: RP contractor dumping a load of backfill soil in the back yard grass area of Non-Responsive .

Category: Site Photo

Latitude:

Date Taken: 7/11/2018

Longitude:

Tags:



APPENDIX D

SUMMARY TABLES

**TABLE 1 – REMOVAL TIMELINE SUMMARY (DEVELOPED BY GHD – REVISED BY
TETRA TECH)**

TABLE 2 – XRF SCREENING RESULTS SUMMARY

TABLE 3 – AIR MONITORING RESULTS SUMMARY (DEVELOPED BY GHD)

TABLE 4 – WASTE STREAM SUMMARY TABLE

TABLE 5 – OU2 REMOVAL ACTION SUMMARY (DEVELOPED BY GHD)

Table 1
Removal Timeline Summary
Pilsen Soil OU2 Residential Site

Property Number	Property Address	Start	Completion	Est. Total Excavation (CY)	Backfill Material	Comments
1	Non-Responsive	12/20/16	12/20/16	0.8	Soil	Raised garden on top of concrete. Only 1 foot of soil above concrete. Bagged soil backfill
2		12/20/16	12/20/16	1.3	Gravel	Back yard along stairs, portion of excavation limited due to tree roots.
3		12/21/16	12/21/16	8.2	Gravel	Due to risk of damaging retaining wall only removed a few inches of gravel then backfilled with 1 foot of new gravel.
4		04/24/17	04/25/17	3.9	Soil	Excavation limited by tree roots
5		04/25/17	05/05/17	34.2	Soil & Sod	
6		05/09/17	05/19/17	29.5	Soil & Gravel	Front yard and back yard were paved by owner. New back yard was considered the south side of the garage. Garden under stairs leading to house was only excavated 14 inches due to supports. Front gardens were slopped away from the supports holding the front sidewalk.
7		05/18/17	05/02/18	18.3	Soil/Gravel/Mulch/Sod	Different layers of backfill were used due to owner changing his mind.
8		05/22/17	05/26/17	26.1	Soil & Mulch	Owner uses one side of the backyard as a garden.
9		05/26/17	06/02/17	12.2	Soil/Sod/Gravel	Soil strip on north side of garage was scraped and backfilled with gravel. Areas with river rock in back and front were given an extra layer of rock to cover.
10		06/05/17	06/08/17	28.3	Gravel	Terraces were sampled as gardens but were only excavated one foot due to owners request. Owner will be building a garage in the near future.
11		06/12/17	06/16/17	37.3	Soil	Two separate garden areas in property. The perimeter garden was below 400 ppm. Inner garden was excavated.
12		06/16/17	06/22/17	34.2	Soil/Sod/Gravel/Mulch	Back yard was broken up into two sections, under stairs and backyard. Excavation under stairs was limited due to supports and catch basin, this area was backfilled with gravel.
13		06/23/17	06/27/17	15.6	Soil/Sod/Mulch	
14		06/28/17	06/28/17	2.8	Gravel	New stairs were built by owner. Slopped away from stair supports.
15		06/29/17	07/14/17	23.0	Soil	West garden was excavated one foot then XRF. 3 point composite and 5 trials with XRF, average of 89.14 ppm. Soil was sent for analyses and came back below 400 ppm. East Garden was excavated the two feet. Both gardens were backfilled with clean dirt. A revisit was required due to owner not liking the content of the soil. Bagged soil from the store was brought in and tilled into both gardens.
16		07/05/17	07/17/07	10.0	Soil	Front yard was not sampled due to the lack of access and amount of debris. It was agreed (USEPA) that bricks and debris in front yard will be leveled out, covered with a weed fabric, and backfilled with approximately 6 inches of clean dirt. Some parts of the back garden were restricted to excavation due to the tree roots. Found ceramic line @ approximately 16 inches below, running north-south on east side of back garden.
17		07/07/17	07/11/17	11.4	Soil	Side garden was excavated to 2 foot mark where there was no column. Due to structure stability of the columns only 3 inches of soil was removed in front of them.
18		07/11/17	07/12/17	4.9	Soil & Sod	
19		07/13/17	07/13/17	3.6	Gravel	One foot excavated in backyard. Backfilled with gravel. Compacted every 3 inches.
20		07/14/17	07/28/17	34.6	Soil & Sod	Removed 5 inches on side strip running adjacent to east fence. Side strip was not sampled. Front yard was not remediated nor sampled due to no access and owners request.
21		07/20/17	07/20/17	1.3	Gravel & Nothing	Soil in front yard was removed and not replaced due to only 2-3inches of dirt on top of concrete. Owner was OK with no front backfill.
22		07/21/17	08/03/17	66.8	Soil	Gardens east of driveway had concrete 8 inches below. Garden running adjacent to east fence was excavated to 18 inches due to concrete. Sloped away from house, catch basin and air conditioner. Whole backyard became garden.
23		08/04/17	08/08/17	30.5	Gravel/Soil/Mulch	Back Garden was only excavated 20 inches. XRF scan confirmed clean depth. No demarcation barrier placed. Backfilled with soil and finished off with mulch.
24		08/09/17	08/09/17	11.1	Soil & Gravel	Gardens surrounding front yard were only excavated one foot (owners orders), started 5/5/17 and completed on 5/9/17. West garden was only excavated 9 inches due to fence supports. Gravel area by front yard was scanned with an XRF was below action level. Gravel area was only excavated 6 inches due to a uniform layer of bricks throughout the area. Gravel area started and completed on 8/9/17.
25		08/09/17	08/09/17	6.0	Soil & Gravel	Backyard (2.5 foot strip of soil between garage and alley) was completed in 2016. Back Garden was completed in 2017. Back Garden was only excavated 18 inches due to finding drain.
26		08/10/17	08/16/17	47.3	Soil & Sod	
27		08/17/17	08/18/17	12.1	Gravel	
28		08/21/17	09/08/17	48.8	Soil/Sod/Gravel	Back yard was broken up into two sections, under deck and back yard. Under deck was only excavated 6 inches due to deck supports and backfilled with gravel (weed fabric was replaced). Side strip was scraped (3 inches) and replaced with gravel. Front yard on north side had a small garden that was excavated the 2 feet and backfilled with soil and finished with mulch.

Table 1
Removal Timeline Summary
Pilsen Soil OU2 Residential Site

Property Number	Property Address	Start	Completion	Est. Total Excavation (CY)	Backfill Material	Comments
29	Non-Responsive	08/21/17	08/31/17	19.0	Soil/Sod/Mulch	Gardens were added by property owner in back yard and north side of front yard.
30		09/11/17	09/14/17	28.4	FY Below 400 ppm, BY Soil & Sod	Front yard was resampled due to new pavers and garden area. Results came back below cleanup levels. Back garden and soil area were added by owner.
31		09/15/17	09/20/17	7.0	Soil & Sod	Rotted tree stump removed from North-East Corner.
32		09/15/17	09/18/17	4.6	Soil	
33		09/19/17	09/26/17	23.3	Soil/Sod/Mulch Soil	Owner was very attached to the flowers and plants in the back garden. Excavated around plants and sloped away to allow one foot excavation in yard. Bagged dirt was brought in for owners garden.
34		09/20/17	09/28/17	16.9	Soil & Sod	Limited excavation around trees due to roots
35		09/29/17	10/09/17	26.9	Soil & Sod	Slope away from gardens in both front yard and back yard.
36		10/03/17	10/09/17	10.8	Soil/Sod/Mulch	Front east garden was only excavated one foot because the property owners wanted sod instead. Backyard was sampled at owner request and results were below 400 ppm
37		10/10/17	10/21/17	40.4	Gravel/Sod/Soil	Back was broken into two areas, sod area and gravel area. Whole back area was excavated 1 foot. Sod area was located on North-West corner of property (22'X13'). Rest of the property was backfilled with gravel.
38		10/12/17	10/18/17	78.9	Soil & Sod	
39		10/23/17	11/03/17	27.9	Soil	Back yard became a garden. Due to large tree roots in garden excavation was done only where possible. Owner wanted soil in front yard because he plans on replacing stairs leading to sidewalk.
40		10/25/17	11/01/17	17.8	Soil & Sod	Worked around tree and rose vine.
41		10/26/17	11/03/17	10.4	Soil & Sod	Slopped away from tree and rose vine
42		10/26/17	11/08/17	24.4	Gravel & Soil	Front yard was excavated two feet due to owner using it as a garden.
43		10/30/17	11/08/17	10.4	Soil & Sod	Front garden was excavated only to 18 inches due to XRF scan.
44		11/08/17	11/14/17	15.1	Soil & River Rock	South garden was not fully excavated to the 2 foot mark due to tree roots. East garden contained two trees.
45		11/15/17	11/16/17	11.9	Soil & Gravel	
46		11/17/17	11/22/17	20.9	Gravel/Soil/Sod	Garden was moved from the north side of the property (adjacent to the driveway) to the west side of property (adjacent to neighboring fence).
47		11/27/17	11/30/17	22.0	Soil & Sod	Garden was added by owner.
48		12/01/17	12/04/17	9.7	Soil	Electric line runs through garden at 6 inches. Excavation sloped away from line.
49		12/01/17	12/04/17	2.0	Gravel/Soil/Mulch	Excavation next to driveway was limited due to tree roots. Approximately 6 inches was removed and backfilled with soil and topped off with mulch.
50		12/05/17	12/06/17	9.3		Excavation sloped away from walkway supports
51		12/07/17	12/13/17	13.6	Soil & Seeded Mat	Front yard was scraped and backfilled with soil. No easy access for sampling and limited due to space and tree roots.
52		12/12/17	05/04/18	21.3	Soil & Sod, Gravel	North side of building was excavated 3 inches and replaced with gravel. Two patches of dirt in front were excavated 3 inches and replaced with gravel. USEPA concerned with exposure and easy access.
53		04/17/18	04/20/18	25.3	Soil	Approximately 4 inches of soil was removed on west garden. Tree roots dictated excavation depth.
54		04/23/18	04/25/18	25.8	Soil/Bagged Soil/Sod	Soil in yard was sloped towards the alley due to property manager concerned with drainage. Bagged soil was brought into back garden.
55		04/25/18	05/07/18	33.1	Gravel/Soil/Sod/Mulch	Excavated only 10 inches due to PVC line on the south-west side of back yard and back garden. Line currently used as a drain line for gutters that leads to the catch basin. Old ceramic line found at 22 inch mark in garden, slopes down from house.
56		05/08/18	05/14/18	16.2	Soil/Mulch/Gravel	Front garden was only excavated approximately 10 inches due to concrete and debris.
57		05/10/18	05/16/18	24.9	Soil/Sod/Mulch/Gravel	Back garden and front strip of dirt was scanned with XRF and results were below the cleanup levels. Excavation around trees was limited due to tree roots.
58		05/17/18	05/25/18	42.4	Gravel & River Rock	River Rock and Weed Fabric was replaced in backyard.
59		05/29/18	06/01/18	28.5	Soil & Gravel	Side yard was broken into two sections, back and front section. Back section still had trees and 6 inches of soil was only excavated where possible. Back section was backfilled with soil. Front section was excavated 1 foot and backfilled with gravel. Backyard was backfilled only up to the 8 inch mark. Property owner wanted space for his permeable pavers.
60		06/04/18	06/07/18	33.2	Soil/Sod/Mulch	Gardening edging around garden was replaced. Mulch around tree was replaced. Excavation in front yard was limited due to large tree roots. Excavation limited in north
61		06/08/18	06/08/18	2.8	Gravel & Dirt	A small area was left with dirt (1X20). Whole area was only excavated to one foot due to footing of building.
62		06/11/18	06/13/18	17.2		Limited excavation around trees due to tree roots
63		06/13/18	06/28/18	31.1	Soil/Sod/Gravel	Gravel area was added by owner after excavation was done.
64		06/13/18	06/28/18	111.1	Soil & Sod	Owner wanted a garden area after excavation was complete and backfilling had begun. Area is located on north west side of property (next to gravel driveway). Owner was made aware of demarcation barrier at one foot mark.
65		06/13/18	06/28/18	12.3	Soil & Sod	Slope away from building.
66		06/29/18	07/09/18	21.7	Soil & Sod	Only excavated 8 inches but backfilled with 12 inches throughout backyard. Original grade was 4 inches below the sidewalk.
67		07/03/18	07/06/18	12.3	Gravel	Back garden and paved area became one area. This area was excavated one foot and backfilled with gravel. Back yard (under stairs) excavation was limited due to work space and structural supports.
68		07/09/18	07/12/18	31.2	Soil/Sod/Gravel	

Table 1
Removal Timeline Summary
Pilsen Soil OU2 Residential Site

Property Number	Property Address	Start	Completion	Est. Total Excavation (CY)	Backfill Material	Comments
69	Non-Responsive	--	--	--	--	Owner Remediated - Property was resampled due to construction of a new building on lot. Results came back below clean up levels.
70		--	--	--	--	Owner Remediated - with concrete
71		--	--	--	--	Inspected with green space but owner refused access
72		--	--	--	--	Inspected with green space but owner refused access
73		--	--	--	--	Inspected with green space but owner refused access
74		--	--	--	--	Inspected and no green space. Owner notified GHD that property has no green space
75		--	--	--	--	Inspected with green space but owner refused access
76		--	--	--	--	Inspected with green space but owner refused access
77		--	--	--	--	Inspected with green space but owner refused access
78		--	--	--	--	Inspected with green space but owner refused access
79		--	--	--	--	Inspected and no green space
80		--	--	--	--	Inspected with no green space. No access agreement
81		--	--	--	--	Inspected with no green space. Access agreement obtained
82		--	--	--	--	Inspected with no green space. No access agreement. Agreement with USEPA that property does not have green space due to the engineered barrier. No further action required.
83		--	--	--	--	Inspected with no green space. No access agreement
84		--	--	--	--	Inspected and no green space
85		--	--	--	--	Inspected and no green space
86		--	--	--	--	Sampled and below 400 ppm
87		--	--	--	--	Sampled and below 400 ppm. Owner stated that current soil was brought in from another location. Back soil strip had an additional sample point underneath van, north end of property which was below 400.
88		--	--	--	--	Sampled and below 400 ppm
89		--	--	--	--	Sampled and below 400 ppm
90		--	--	--	--	Sampled and below 400 ppm
91		--	--	--	--	Sampled and below 400 ppm
92		--	--	--	--	Sampled and below 400 ppm
93		--	--	--	--	Sampled and below 400 ppm. Sampled with results below cleanup levels. Area used as parking spots was not sampled due to thick layer of gravel. Property owner mentioned a building use to reside were the parking spots are now. Building was torn down and the rubble was just spread throughout the parking spots.
94		--	--	--	--	Sampled - Lead Results Above 400 ppm - Owner Denied Access
95		--	--	--	--	Sampled - Lead Results Above 400 ppm - Owner Denied Access

Notes:

CY = Cubic Yards

ppm = parts per million

Non-Responsive

- = Residential property with lead in soil concentrations greater than the remedial objective of 400 parts per million (ppm) - remediated by RP contractors
- = Residential property previously identified with lead in soil concentrations greater than the remedial objective of 400 ppm - remediated by property owner
- = Residential property inspected to have green space - property owner refused access
- = Residential property inspected to have no green space
- = Residential property with lead in soil concentrations less than the remedial objective of 400 ppm
- = Residential property with lead in soil concentrations greater than the remedial objective of 400 ppm - property owner refused access

Table 2
XRF Screening Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Address	Sample ID	Date	Time	Depth (Inches Bgs)	Lead Result (ppm)	Error (+/-)	Sample Description
Staging Area	Rough Clean Backfill Test 1	6/23/2017	11:40:00	0	47.6	1.8	5 scoop homogenized composite of rough clean backfill soil
Staging Area	Rough Clean Backfill Test 2	6/23/2017	11:41:16	0	25.4	1.5	5 scoop homogenized composite of rough clean backfill soil
Staging Area	Rough Clean Backfill Test 3	6/23/2017	11:42:43	0	23.5	1.6	5 scoop homogenized composite of rough clean backfill soil
Staging Area	Rough Clean Backfill Test 4	6/23/2017	11:44:17	0	25.6	1.6	5 scoop homogenized composite of rough clean backfill soil
Staging Area	Rough Clean Backfill Test 5	6/23/2017	11:45:39	0	25.5	1.5	5 scoop homogenized composite of rough clean backfill soil
Non-Responsive		6/29/2017	9:36:10	0-12	104	2	BY Garden Composite Sample
		6/29/2017	9:38:22	0-12	90	2	BY Garden Composite Sample
		6/29/2017	9:39:56	0-12	82	2	BY Garden Composite Sample
		6/29/2017	9:41:22	0-12	101	2	BY Garden Composite Sample
		6/29/2017	9:42:51	0-12	68.7	1.9	BY Garden Composite Sample
		7/21/2017	9:46:49	12	907	7	BY Garden
		7/21/2017	9:48:52	12	1152	9	BY Garden
		7/21/2017	10:06:43	18	1329	10	BY Garden
		7/21/2017	10:08:45	18	747	6	BY Garden
		7/21/2017	10:11:01	18	690	6	BY Garden
		7/21/2017	10:12:56	18	1164	8	BY Garden
		7/21/2017	10:14:47	18	622	6	BY Garden
		7/28/2017	10:06:12	0	408	4	FY Gravel Area
		7/28/2017	10:08:02	0	1018	8	FY Gravel Area
		7/28/2017	10:09:51	0	528	5	FY Gravel Area
		7/28/2017	10:12:05	0	321	4	FY Gravel Area
		7/28/2017	10:13:45	0	505	5	FY Gravel Area
		7/28/2017	10:22:26	0	551	5	BY Circular Garden
		7/28/2017	10:24:34	0	461	5	BY Circular Garden
		7/28/2017	10:26:22	0	336	4	BY Circular Garden
		7/28/2017	10:27:59	0	393	4	BY Circular Garden
		8/4/2017	12:33:48	18-24	197	4	BY Garden
		8/4/2017	12:36:50	18-24	285	4	BY Garden
		8/4/2017	12:38:28	18-24	311	5	BY Garden
		8/4/2017	12:40:05	18-24	341	5	BY Garden
		8/4/2017	12:41:41	18-24	348	5	BY Garden
		8/4/2017	13:05:41	20-24	192	4	BY Garden
		8/4/2017	13:10:02	20-24	104	3	BY Garden
		8/4/2017	13:11:34	20-24	189	4	BY Garden
		8/4/2017	13:13:21	20-24	221	4	BY Garden
		8/4/2017	13:15:35	20-24	107	3	BY Garden
		8/18/2017	9:41:38	0-12	202	4	FY Garden
		8/18/2017	9:43:12	0-12	280	4	FY Garden
		8/18/2017	9:44:59	0-12	176	3	FY Garden
		8/18/2017	9:46:55	0-12	146	3	FY Garden
		8/18/2017	9:48:33	0-12	222	4	FY Garden
		8/18/2017	10:27:14	0-6	421	5	Backyard
		8/18/2017	10:29:14	0-6	589	7	Backyard
		8/18/2017	10:30:55	0-6	437	6	Backyard
		8/18/2017	10:32:22	0-6	184	3	Backyard
		8/18/2017	10:33:55	0-6	627	7	Backyard
		8/18/2017	11:35:12	0-12	420	5	FY Garden
		8/18/2017	11:36:39	0-12	429	6	FY Garden
		8/18/2017	11:38:06	0-12	349	5	FY Garden
		8/18/2017	11:39:50	0-12	258	4	FY Garden
		8/18/2017	11:41:23	0-12	254	4	FY Garden

Table 2
XRF Screening Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Address	Sample ID	Date	Time	Depth (Inches Bgs)	Lead Result (ppm)	Error (+/-)	Sample Description
Staging Area	SCBFS_001a	8/18/2017	13:22:07	0	24	1.9	5 scoop homogenized composite of clean backfill soil
Staging Area	SCBFS_001b	8/18/2017	13:23:39	0	24.5	1.9	5 scoop homogenized composite of clean backfill soil
Staging Area	SCBFS_001c	8/18/2017	13:25:50	0	21.1	1.9	5 scoop homogenized composite of clean backfill soil
Staging Area	SCBFS_001d	8/18/2017	13:27:23	0	26.3	1.9	5 scoop homogenized composite of clean backfill soil
Staging Area	SCBFS_001e	8/18/2017	13:29:17	0	27.3	1.9	5 scoop homogenized composite of clean backfill soil
Non-Responsive		10/3/2017	9:42:54	0-6	317	5	BY Composite Sample
		10/3/2017	9:44:19	0-6	266	4	BY Composite Sample
		10/3/2017	9:45:54	0-6	338	5	BY Composite Sample
		10/3/2017	9:47:17	0-6	324	5	BY Composite Sample
		10/3/2017	9:48:43	0-6	298	5	BY Composite Sample
		10/3/2017	10:22:02	0-12	565	7	FY Garden Composite Sample
		10/3/2017	10:23:40	0-12	667	7	FY Garden Composite Sample
		10/3/2017	10:24:59	0-12	541	6	FY Garden Composite Sample
		10/3/2017	10:26:46	0-12	467	6	FY Garden Composite Sample
		10/3/2017	10:28:21	0-12	531	6	FY Garden Composite Sample
		10/3/2017	13:02:13	12	734	8	FY Garden - In-situ
		10/3/2017	13:04:29	12	714	7	FY Garden - In-situ
		10/30/2017	10:26:33	16	194	4	FY Garden
		10/30/2017	10:29:08	16	253	4	FY Garden
		10/30/2017	10:33:34	16	354	5	FY Garden
		10/30/2017	10:35:55	20	367	5	FY Garden
		10/30/2017	11:22:25	18	71	2	FY Garden
		10/30/2017	11:25:43	12	60	2	FY Garden
		10/30/2017	11:34:33	19	16.8	1.7	FY Garden
		10/30/2017	11:37:53	13	49	2	FY Garden
		10/30/2017	11:39:29	13	78	2	FY Garden
		5/14/2018	9:15:08	0	147.9	2	North Side - Fence Line
		5/14/2018	9:17:01	0	141	2	North Side - Fence Line
		5/14/2018	9:18:51	0	174	2	North Side - Fence Line
		5/14/2018	9:20:37	0	175	2	East Side
		5/14/2018	9:22:05	0	118.3	1.9	East Side
		5/14/2018	9:23:34	0	153	2	East Side
		5/14/2018	9:31:12	0	82.2	1.3	FY Soil Area
		5/22/2018	10:26:58	0-6	1437	11	BY Soil Area
		5/22/2018	10:29:58	0-6	1278	11	BY Soil Area
		5/22/2018	10:32:01	0-6	1463	12	BY Soil Area
		5/22/2018	10:33:57	0-6	1640	13	BY Soil Area
		5/22/2018	10:36:33	0-6	1605	13	BY Soil Area
		5/22/2018	10:39:49	0-6	1110	9	BY Garden Area
		5/22/2018	10:41:23	0-6	1180	10	BY Garden Area
		5/22/2018	10:43:09	0-6	1040	8	BY Garden Area
		5/22/2018	10:44:53	0-6	1118	9	BY Garden Area
		5/22/2018	10:46:30	0-6	1071	9	BY Garden Area
		5/22/2018	10:49:38	0-6	1593	12	West Side Garden Area
		5/22/2018	10:51:34	0-6	1602	12	West Side Garden Area
		5/22/2018	10:53:22	0-6	1685	12	West Side Garden Area
		5/22/2018	10:55:06	0-6	1581	11	West Side Garden Area
		5/22/2018	10:56:57	0-6	1294	10	West Side Garden Area
		5/22/2018	11:02:12	0-6	2435	16	East Side Garden Area
		5/22/2018	11:04:31	0-6	2610	17	East Side Garden Area
		5/22/2018	11:06:21	0-6	2800	17	East Side Garden Area
		5/22/2018	11:08:11	0-6	2830	17	East Side Garden Area
		5/22/2018	11:09:42	0-6	2666	17	East Side Garden Area
		5/22/2018	11:17:15	0-6	1191	9	FY Soil Area
		5/22/2018	11:18:49	0-6	1102	9	FY Soil Area
		5/22/2018	11:20:28	0-6	1016	8	FY Soil Area
		5/22/2018	11:22:16	0-6	1186	9	FY Soil Area
		5/22/2018	11:23:55	0-6	1178	9	FY Soil Area
		5/22/2018	11:28:32	0-12	1982	14	FY Garden Area
		5/22/2018	11:31:04	0-12	1643	12	FY Garden Area
		5/22/2018	11:32:46	0-12	1650	12	FY Garden Area
		5/22/2018	11:35:10	0-12	1481	11	FY Garden Area
		5/22/2018	11:36:44	0-12	1598	12	FY Garden Area

Table 2
XRF Screening Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Address	Sample ID	Date	Time	Depth (Inches Bgs)	Lead Result (ppm)	Error (+/-)	Sample Description
Non-Responsive		5/25/2018	13:26:12	0-6	1261	11	BY Soil Area
		5/25/2018	13:27:58	0-6	1102	10	BY Soil Area
		5/25/2018	13:29:38	0-6	1226	11	BY Soil Area
		5/25/2018	13:31:23	0-6	1122	10	BY Soil Area
		5/25/2018	13:33:06	0-6	1797	13	BY Soil Area
		7/17/2018	9:34:22	0	27.2	1.8	BY Parking Pad Soil Surface
		7/17/2018	9:36:37	0	34	2	BY Parking Pad Soil Surface
		7/17/2018	9:41:53	0-12	183	4	BY Garden
		7/17/2018	9:43:23	0-12	163	4	BY Garden
		7/17/2018	9:44:55	0-12	130	3	BY Garden
		7/17/2018	9:46:36	0-12	169	4	BY Garden
		7/17/2018	9:48:10	0-12	200	4	BY Garden
		7/17/2018	9:54:21	0-6	185	4	BY Soil Strip
		7/17/2018	9:56:01	0-6	194	4	BY Soil Strip
		7/17/2018	9:57:32	0-6	214	11	BY Soil Strip
		7/17/2018	9:59:11	0-6	228	4	BY Soil Strip
		7/17/2018	10:00:33	0-6	187	4	BY Soil Strip

Notes:

349	= Lead concentration greater than the conservative upper predication limit of 290 ppm ¹
421	= Lead concentration greater than the EPA residential RML of 400 ppm

bgs = below ground surface

BY = Backyard

Cal Check = Calibration Check

en = End

EPA = U.S. Environmental Protection Agency

FY = Front yard

GW, IN = Initials of RP Contractor collecting the sample

INSC = In-situ screen

nist = National Institute of Standards and Technology Standard Reference Material 2781

ppm = parts per million

RML = removal management level

S = Soil

SCBFS = sample composite backfill soil

si = Silica (SiO₂) Standard

st = Start

1 - The upper predication limit of 290 ppm was provided in a Simple Linear Regression and Diagnostics Results for Lead report by the EPA Region V FIELDS Group

-The cumulative residential RML above can be located at <https://www.epa.gov/risk/regional-removal-management-levels-chemicals-rmls>

-Cumulative RMLs are adjusted to a target risk level of 10⁻⁴ for carcinogens and an hazard quotient of 3 for noncarcinogens

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Property Address	Date	Soil Type	Location	Readings (mg/m^3)	
				CONC	TWA
Non-Responsive	4/24/2017	D	Back Garden	0	0
				0.007	0.015
				0	0.011
				0.013	0.013
		C		0.002	0.018
				0.009	0.05
Non-Responsive	4/25/2017	D	Front Yard	0.005	0.014
				0.043	0.023
				0.006	0.004
				0.004	0.011
				0.021	0.019
				0.032	0.016
				0.021	0.009
	4/26/2017			0.06	0.016
				0.022	0.016
				0.05	0.021
				0.242	0.079
				0.008	0.001
				0.004	0.002
	4/27/2017			0.005	0.017
				0.022	0.006
				0.013	0.101
				0.002	0
		0.03		0.001	
	4/28/2017	C		0.034	0.021
				0.02	0.013
				0.022	0.019
				0.014	0.003
				0.015	0.025
				0.059	0.012
				5/2/2017	0.024
	0.09				0.05
	0.012				0.007
	5/3/2017			0.007	0.009
				0.03	0.019
				0.025	0.025
	5/4/2017			D	Front Garden
0.045			0.021		
C		0.244	0.218		
		5/8/2017	D	West Garden	0.035
C			0.051		0.01
5/9/2017		D	East Garden	0.008	0.008
	5/10/2017	D	Front Garden	0.055	0.017
		C		0.043	0.027
				0.073	0.026

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	5/11/2017	D	Back Garden	0.043	0.027
	5/12/2017	C	Back Yard	0.069	0.021
		D		0.019	0.003
				0.078	0.021
	5/15/2017			C	0.043
	5/16/2017	0.045			0.019
		0.041			0.011
		0.027			0.021
0.148		0.082			
5/17/2017		0.035	0.011		
Non-Responsive	5/18/2017	D	Back Yard	0.1	0.011
			Vac Truck	0.025	0.002
				0.119	0.024
				0.149	0.048
Non-Responsive	5/22/2017	D	Back Yard	0.035	0.025
			Vac Truck	1.123	0.458
			Back Yard	0.008	0.019
				0	0
	0.009	0.007			
5/25/2017	C		0	0	
Non-Responsive	5/30/2017	D	Back Yard	0.026	0.013
	0.021			0.011	
	5/31/2017	0.013		0.009	
	6/1/2017	C		0.049	0.028
				0.085	0.085
0.005			0.001		
Non-Responsive	6/5/2017	D	Back Yard	0.025	0.224
				0.006	0.049
				0.021	0.022
				0.002	0.01
			0.002	0.007	
			Vac Truck	0.184	0.042
				0.097	0.2
				0.011	0.009
	0.019			0.007	
	6/6/2017		Back Yard	0	0.003
				0.057	0.332
			Vac Truck	0.007	0
				0	0.203
	6/7/2017		C	Back Yard	0.056
6/8/2017	0.097	0.262			
Non-Responsive	6/9/2017	D	Front Garden	0.067	0.022
	6/12/2017			0.054	0.054
			Vac Truck	0.083	0.038
	6/13/2017		Front Garden	0.28	0.08
				0.283	0.097

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

			Vac Truck	0.04	0.055
	6/14/2017	C	Front Garden	0.2	0.102
	6/15/2017			0.873	0.562
Non-Responsive	6/19/2017	D	Vac Truck	0.05	0.01
	6/20/2017	C	Back Yard	0.459	0.039
	6/21/2017			0.207	0.105
Non-Responsive	6/28/2017	D	Under Stairs	0.084	0.089
Non-Responsive	7/6/2017	D	Near Excavation	0.338	0.326
				0.36	0.182
Non-Responsive	7/11/2017	D	Near Excavation	0.905	0.458
				0.45	0.289
Non-Responsive	7/13/2017	D	Near Excavation	0.016	0.011
Non-Responsive	7/21/2017 7/24/2017 7/25/2017 7/26/2017 7/27/2017 7/31/2017 8/1/2017	D	Near Excavation	0.029	0.015
			Near Vac Truck	0.143	0.039
			Near Excavation	0.016	0.003
			Near Vac Truck	0.562	0.052
			Near Excavation	0.004	0.002
				0.001	0.001
			Near Vac Truck	0.25	0.106
				0.982	0.451
			Near Excavation	0.21	0.045
				0.266	0.203
			C	Near Truck Bed	0.03
		Near Backfill		0.013	0.014
		Near Truck Bed		0.248	0.087
				0.192	0.11
		Near Truck Bed		0.037	0.015
				Near Backfill	0.026
			0.63	0.146	
H.Kramer - (Staging Area)	8/18/2017	C	Clean Box	0.018	0.013
		D	Other Boxes	0.027	0.022
Non-Responsive	8/22/2017	D	Work Site	0.031	0.003
				0.009	0.005
			Vacuum Truck	0.691	0.05
0.12	0.024				
Non-Responsive	8/23/2017		Work Site	0.004	0.007
				0.009	0.015
				0.058	0.022
			Vacuum Truck	0.913	0.277
				0.115	0.031
				0.172	0.022
Non-Responsive	8/24/2017			Generator	0.022
		Truck Bed		0.166	0.103
				0.197	0.056
				0.65	0.03
				0.63	0.146

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	8/25/2017	C	Work Site	0.044	0.058
				0.192	0.097
				0.138	0.01
			Truck Bed	0.079	0.082
				0.203	0.054
				0.164	0.061
	8/28/2017	D	Work Site	0.005	0.041
				0.157	0.021
				0.13	0.043
			Vacuum Truck	0.07	0.021
				0.218	0.03
				0.54	0.071
		C	Work Site	0.151	0.033
				0.01	0.012
				0.007	0.002
				0.012	0.006
Non-Responsive	9/1/2017	D	Work Site	0.037	0.023
				0.002	0.002
				0.019	0.011
			Vacuum Truck	0.06	0.05
				0.041	0.007
				0.009	0.004
	9/5/2017	D	Work Site	0.43	0.05
				0.046	0.02
				0.014	0.022
			Vacuum Truck	0.012	0.024
				0.015	0.005
				0.025	0.025
	9/6/2017	C	Work Site	0.088	0.06
				0.099	0.015
				0.058	0.024
			Truck Bed	0.112	0.114
				0.213	0.203
				0.109	0.093
	9/7/2017	C	Compactor	0.253	0.05
				0.494	0.14
				0.311	0.111
			Truck Bed	0.265	0.137
				0.42	0.237
				0.55	0.22
			Work Site	0.029	0.004
				0.171	0.031
				0.157	0.076
			Truck Bed	0.354	0.331
				0.116	0.034
				0.053	0.023
				0.113	0.059

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

				0.18	0.172	
H.Kramer - Staging Area			Staging Area	0.008	0.007	
			Loading Bob Cat	0.097	0.014	
Non-Responsive	9/15/2017	D	Vacuum Truck	0.0023	0.009	
			Work Site	0.027	0.013	
Non-Responsive	9/20/2017		Work Site	0.002	0.001	
				0.088	0.022	
			Vacuum Truck	1.005	0.258	
				0.225	0.03	
Non-Responsive	9/21/2017		Work Site	0.003	0.003	
				0.007	0.003	
			Vacuum Truck	0.287	0.032	
Non-Responsive	9/22/2017	C	Work Site	0.103	0.023	
				0.064	0.186	
			Truck Bed	0.65	0.23	
				0.543	0.23	
			Generator	0.22	0.272	
				0.97	0.501	
Non-Responsive	9/25/2017		Work Site	0.006	0.002	
			Conveyors	0.84	0.491	
			Truck Bed	0.328	0.405	
Non-Responsive	9/29/2017	D	Around House	0.022	0.036	
			Vacuum Truck	0.459	0.069	
				0.191	0.063	
			Work Site	0.029	0.05	
0.033	0.044					
H. Kramer Staging Area	9/29/2017		Unloading VacTruck	0.07	0.021	
			Surrounding Area	0.218	0.03	
			Bob Cat Unloading	0.54	0.071	
Non-Responsive	10/3/2017	D	Work Site	0.086	0.053	
				0.061	0.047	
			Vacuum Truck	0.133	0.046	
				0.195	0.1	
			Around House	0.045	0.042	
				0.024	0.051	
Non-Responsive	10/5/2017	C	Truck Bed	0.032	0.009	
				0.045	0.044	
			Work Site	0.006	0.002	
				0.178	0.152	
			2nd Conveyor	0.434	0.039	
				0.65	0.19	
				Around House		
					0.026	0.178
		Alley			0.002	0.001
					0.072	0.032
0.049	0.108					
				0.279	0.021	

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	10/10/2017	D	Mini Excavator	0.211	0.03
				0.353	0.252
			Worksite	0.021	0.016
				0.059	0.029
				0.015	0.018
Non-Responsive	10/12/2017	D	Worksite	0.002	0
				0	0
				0	0
				0.026	0.016
	10/13/2017		Dirt Pile	0	0
				0	0
				0	0
				0.002	0.001
				0	0.01
				0.004	0.001
	10/16/2017		Worksite	0.02	0.006
				0.043	0.017
			Sidewalk	0.014	0.011
				Worksite	0.029
			0.035		0.028
			0.065		0.035
			Bobcat	0.03	0.034
				0.134	0.037
Non-Responsive	10/19/2017	D	Worksite	0.028	0.005
				0	0
			Alley	0	0
			Mini Excavator	0.136	0.025
			Truck Bed	0.003	0.024
Non-Responsive	10/25/2017	D	Vac Truck	0	0
				0.002	0.012
				0.015	0.01
				0.015	0.031
			Worksite	0.002	0.001
				0.014	0.01
				0.014	0.008
				0.005	0.022
	10/26/2017		Vac Truck	0.019	0.018
				0.03	0.005
				0.032	0.015
				0.016	0.004
			Worksite	0.021	0.018
				0.012	0.006
				0.083	0.027
				0.008	0.004
			Vac Truck	0.034	0.006
				0.009	0.008
				0.029	0.005

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	10/27/2017	D	Worksite	0.041	0.009	
	10/30/2017			Vac Truck	0.025	0.006
					0.011	0.007
					0.011	0.004
					0.005	0.008
			Worksite	0.012	0.011	
				0.005	0.005	
				0.014	0.009	
				0.001	0.005	
			Worksite	0.008	0.01	
	0.005			0.006		
	0.008			0.007		
	0.006			0.006		
Non-Responsive	2-Nov	C	Worksite	0	0	
				0	0	
			Truck Bed	0	0	
Non-Responsive	11/6/2017	C	Truck Bed	0.022	0.009	
				0.015	0.008	
			Work Site	0.008	0.004	
				0.007	0.007	
			Conveyors	0.021	0.006	
				0.02	0.007	
Non-Responsive	11/8/2017	C	Work Site	0.009	0.004	
				0.007	0.031	
			Alley	0.006	0.005	
			Truck Bed	0.075	0.06	
			Conveyors	0.083	0.031	
Non-Responsive	11/13/2017	C	Truck Bed	0.063	0.063	
			Conveyors	0.007	0.007	
Non-Responsive	11/17/2017	D	Truck Bed	0.033	0.04	
				0.037	0.056	
			Dingo/Worksite	0.043	0.037	
				0.07	0.052	
			Conveyors	0.029	0.038	
Non-Responsive	11/27/2017	D	Work Site	0.075	0.041	
				0.04	0.037	
				0.036	0.028	
				0.035	0.027	
			Back Yard	0.046	0.037	
				0.03	0.035	
				0.029	0.027	
				0.027	0.021	
			Work Site	0.055	0.042	
				0.016	0.015	
				0.031	0.028	
				0.02	0.023	

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	11/28/2017	D	Back Yard	0.038	0.015
				0.028	0.025
			Vacuum Truck	0.21	0.035
				0.247	0.036
				0.129	0.033
			Alley	0.013	0.039
				0.004	0.044
				0.048	0.042
Non-Responsive	12/4/2017	C	Worksite	0.005	0.003
				0.03	0.034
				0.035	0.033
				0.029	0.029
			Conveyors	0.001	0.006
				0.038	0.034
				0.032	0.03
			Truck Bed/Alley	0.026	0.033
				0.042	0.037
				0.022	0.021
Non-Responsive	12/5/2017	D	Worksite	0.007	0.011
				0.014	0.031
				0.016	0.025
			Sidewalk	0.025	0.029
				0.146	0.033
				0.003	0.01
			Vacuum Truck	0.099	0.062
				0.019	0.032
Non-Responsive	12/11/2017	C	Truck Bed	0.094	0.093
				0.104	0.099
				0.088	0.089
			Worksite	0.25	0.16
				0.104	0.099
				0.088	0.089
Non-Responsive	12/21/2017		Bob Cat	0.045	0.03
				0.052	0.037
			Sweeping Zone	0.211	0.082
				0.376	0.112
			Truck Bed	0.017	0.027
Non-Responsive	4/17/2018	D	Worksite	0.004	0.003
			Alley	0.002	0.002
			Worksite	0.003	0.005
			Vac Truck	0.131	0.085
			Worksite	0.003	0.042
			Vac Truck	0.129	0.084
			Worksite	0.009	0.006
			Vac Truck	0.1	0.053
			Worksite	0.003	0.003

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

			Vac Truck	0.025	0.024
			Worksite	0.027	0.081
			Vac Truck	0.204	0.112
Non-Responsive	4/18/2018	C	Worksite	0.007	0.007
			Truckbed	0.014	0.008
			Worksite	0.023	0.023
			Truckbed	0.037	0.024
			Worksite	0.003	0.003
			Truckbed	0.004	0.002
			Worksite	0.003	0.002
			Truckbed	0.009	0.006
			Worksite	0.009	0.021
			Truckbed	0.018	0.022
Non-Responsive	4/19/2018	D	Worksite	0.012	0.011
			Truckbed	0.012	0.009
			Worksite	0.007	0.128
			Vac Truck	0.48	0.158
			Worksite	0.023	0.023
			Vac Truck	0.101	0.056
			Worksite	0.023	0.025
			Vac Truck	0.093	0.044
			Worksite	0.046	0.044
			Vac Truck	0.026	0.043
Non-Responsive	4/20/2018	C	Truckbed	0	0.04
			Worksite	0.002	0.041
			Trench	0.04	0.035
			Truckbed	0.004	0.005
			Worksite	0.002	0.005
			Truckbed	0.229	0.002
			Worksite	0.021	0.002
			Truckbed	0.002	0
			Worksite	0.006	0
Non-Responsive	4/24/2018	C	Worksite	0	0
			Truckbed	0.016	0.003
Non-Responsive	4/25/2018	C	Worksite	0.016	0.014
Truckbed			0.022	0.015	
Non-Responsive		D	Worksite	0.064	0.036
			Vac Truck	0.438	0.111
			Worksite	0.008	0.034
			Vac Truck	0.08	0.045
			Worksite	0.016	0.011
			Vac Truck	0.088	0.041
			Worksite	0.009	0.107
			Vac Truck	0.23	0.18
Non-Responsive	4/26/2018	C	Worksite	0	0
			Worksite	0.02	0.012
			Truckbed	0.047	0.017

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

			Worksite	0.077	0.072
			Truckbed	0.007	0.023
Non-Responsive	4/27/2018	D	Worksite	0.012	0.012
			Truckbed	0.013	0.014
			Worksite	0.034	0.017
			Truckbed	0.012	0.011
		C	Worksite	0.075	0.053
			Truckbed	0.035	0.045
Non-Responsive	4/30/2018	C	Worksite	0.03	0.031
			Truckbed	0.024	0.03
			Worksite	0.009	0.008
			Truckbed	0.018	0.016
			Worksite	0.001	0.0023
			Truckbed	0.029	0.032
			Generator	0.007	0.027
			Worksite	0.001	0.009
			Truckbed	0.015	0.017
			Generator	0.02	0.015
			Worksite	0.006	0.003
			Truckbed	0.006	0.005
			Generator	0.004	0.005
			Non-Responsive	5/1/2018	C
Truckbed	0.022	0.008			
Non-Responsive	5/2/2018	C	Worksite	0.024	0.023
			Truckbed	0.036	0.026
			Worksite	0.039	0.039
			Truckbed	0.073	0.021
			Worksite	0.027	0.013
			Truckbed	0.033	0.017
			Worksite	0.062	0.003
			Truckbed	0.059	0.057
Non-Responsive	7-May	D	Worksite	0.006	0.009
Truck Bed			0	0.008	
H.Kramer Yard		D	Bobcat	0.058	0.048
			Dirty Box	0.026	0.031
			Down Wind	0.009	0.036
Non-Responsive		C	Worksite	0	0.009
			Generator	0.046	0.025
			Truck Bed	0	0.014
			Worksite	0.224	0.004
			Truck Bed	0.021	0.071
			Generator	0.063	0.066
			Worksite	0.051	0.023
			Truck Bed	0.018	0.01
Generator		0.019	0.029		
				Worksite	0.001
			Worksite	0.015	0.003

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	8-May	D	Worksite	0	0
			Soil Pile	0	0.001
			Worksite	0	0
			Truck Bed	0.039	0.018
			Truck Bed	0.009	0.013
			Worksite	0.024	0.019
Non-Responsive	9-May	D	Worksite	0.016	0.015
			Vacuum Truck	0.095	0.03
			Worksite	0.019	0.025
			Vacuum Truck	0.025	0.025
			Worksite	0.036	0.031
			Vacuum Truck	0.034	0.033
		C	Worksite	0.032	0.031
Non-Responsive	10-May	D	Worksite	0.035	0.032
			Worksite	0.042	0.035
			Vacuum Truck	0.103	0.091
H.Kramer Yard		C	Yard	0.005	0.006
Non-Responsive	16-May	C	Alley	0	0
			Worksite	0	0
			Worksite	0	0.003
			Conveyors	0.047	0.03
			Worksite	0	0
			Conveyors	0.016	0.006
			Worksite	0	0
			Conveyors	0.042	0.018
Non-Responsive	17-May	D	Worksite	0	0
			Worksite	0	0
			Vacuum Truck	0.054	0.01
			Worksite	0.02	0.019
			Worksite	0.002	0.001
			Vacuum Truck	0.043	0.027
			Worksite	0.023	0.017
			Vacuum Truck	0.178	0.019
Non-Responsive	18-May	D	Worksite	0.023	0.013
			Vacuum Truck	0.434	0.111
			Worksite	0.014	0.015
			Vacuum Truck	0.106	0.049
			Worksite	0.019	0.02
			Vacuum Truck	0.237	0.049
Non-Responsive	22-May	D	Worksite	0.043	0.046
			Vacuum Truck	0.402	0.078
			Worksite	0.027	0.012
			Vacuum Truck	0.217	0.112
Non-Responsive	23-May	C	Worksite	0.08	0.077
			Truck Bed	0.074	0.069
			Worksite	0.069	0.065
			Truck Bed	0.084	0.071

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Non-Responsive	23-May	C	Worksite	0.028	0.025
			Truck Bed	0.031	0.02
			Worksite	0.023	0.022
			Truck Bed	0.023	0.03
			Worksite	0.034	0.029
			Truck Bed	0.025	0.029
Non-Responsive	29-May	D	Worksite	0.003	0.004
			Vacuum Truck	0.074	0.041
			Worksite	0.007	0.006
			Vacuum Truck	0.02	0.017
			Worksite	0.035	0.032
			Vacuum Truck	0.913	0.302
Non-Responsive	30-May	D	Worksite	0.034	0.033
			Vacuum Truck	0.089	0.063
			Worksite	0.024	0.024
			Vacuum Truck	0.053	0.058
Non-Responsive	4-Jun	D	Worksite	0	0
			Vacuum Truck	0	0
			Worksite	0.013	0.01
			Vacuum Truck	0.012	0.014
			Worksite	0.009	0.003
			Vacuum Truck	0.002	0.005
			Worksite	0	0.03
			Vacuum Truck	0.103	0.084
			Worksite	0.01	0.002
			Vacuum Truck	0.01	0.009
Non-Responsive	5-May	D	Worksite	0.017	0.014
			Vacuum Truck	0.014	0.013
			Worksite	0.017	0.016
			Vacuum Truck	0.02	0.021
			Worksite	0.003	0.005
			Vacuum Truck	0.007	0.007
			Worksite	0.01	0.011
			Vacuum Truck	0.007	0.006
Non-Responsive	8-Jun	D	Worksite	0.019	0.015
			Truck Bed	0.024	0.019
		C	Worksite	0.029	0.028
			Truck Bed	0.027	0.028
Non-Responsive	6/12/2018	C	Alley	0.029	0.04
				0.046	0.045
				0.054	0.053
				0.043	0.035
				0.049	0.048
			Worksite	0.044	0.041
				0.049	0.047
				0.045	0.045
				0.025	0.027

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

				0.047	0.044
Non-Responsive	6/14/2018	D	Worksite	0.01	0.005
				0.005	0
				0.011	0.011
				0.027	0.006
				0.003	0.004
			Vacuum Truck	0.109	0.027
				0.46	0.097
				0.034	0.008
				0.136	0.023
				0.075	0.005
Non-Responsive	6/18/2018	D	Worksite	0.002	0.003
				0	0
				0.112	0.108
				0.008	0.004
			Excavator	0.022	0.006
				0.002	0.001
			Skid Steer	0.004	0.002
			Front Sidewalk	0	0
				0	0.012
				0.02	0.008
Non-Responsive	6/19/2018	D	Worksite	0.025	0.021
				0.016	0.02
				0.026	0.026
				0.021	0.025
				0.008	0.006
			Alley	0.02	0.02
				0.036	0.021
				0.005	0.004
			Front Sidewalk	0.021	0.023
				0.008	0.005
Non-Responsive	6/20/2018	D	Worksite	0.012	0.011
				0.008	0.011
			Alley	0.019	0.018
				0.024	0.015
Non-Responsive	6/29/2018	D	Worksite	0.017	0.015
				0.03	0.025
				0.041	0.043
				0.021	0.029
				0.019	0.02
			Front Yard	0.034	0.036
				0.02	0.023
				0.035	0.038
				0.022	0.028
				0.034	0.027
				0.029	0.039
			Vacuum Truck	0.568	0.175

Table 3 - GHD Air Monitoring Results Summary
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

			vacuum truck	0.087	0.041
Non-Responsive	7/3/2018	D	Worksite	0.091	0.05
				0.029	0.015
				0.0183	0.031
				0.025	0.022
				0.033	0.016
				0.026	0.023
			Front Sidewalk	0.009	0.031
			Vacuum Truck	0.022	0.02
				0.057	0.023
				0.032	0.022
				0.111	0.028
0.265	0.17				
Non-Responsive	7/9/2018	C	Worksite	0.013	0.017
				0.001	0.016
Non-Responsive	7/10/2018	D	Worksite	0.111	0.13
				0.062	0.064
				0.033	0.027
				0.028	0.138
				0.086	0.146
				0.051	0.039
			Vacuum Truck	0.036	0.058
				0.036	0.028
				0.475	0.368
				0.085	0.113
				0.072	0.044
Average				0.083111	0.043617
Soil Types - Dirty {D} and Clean {C}					
Notes: No readings above action level detected. Readings above the Action Level of 1.9 mg/m^3 , according to Health and Safety Plan, requires stoppage of work and additional engineering controls to be implemented.					

Table 4
Waste Stream Summary Table
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Manifest /Ticket#	Quantity (in tons)	Ship Date	Waste Stream	Disposal Facility
851385	10.16	12/22/2016	Soil	Laraway RDF, Waste Management, Joliet, IL
889972	9.42	4/26/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
890592	11.98	4/27/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
891212	12.39	4/28/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
894904	7.95	5/8/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
896484	11.98	5/10/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
898993	13.78	5/16/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
900453	13.71	5/18/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
900819	11.89	5/19/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
901772	10.49	5/23/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
902005	10.97	5/23/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
902633	9.66	5/24/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
904544	10.65	5/31/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
904744	11.78	5/31/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
906769	10.29	6/6/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
907097	11.39	6/6/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
907872	11.46	6/8/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
909380	11.71	6/12/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
910628	13.4	6/14/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
912198	10.51	6/20/2017	Soil	Laraway RDF, Waste Management, Joliet, IL

Table 4
Waste Stream Summary Table
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

Manifest /Ticket#	Quantity (in tons)	Ship Date	Waste Stream	Disposal Facility
912948	12.69	6/20/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
915055	11.06	6/26/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
915272	12.19	6/26/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
917400	13.74	6/30/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
919629	13.61	7/7/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
921304	13.45	7/11/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
922888	12.87	7/14/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
923037	12.71	7/17/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
923543	14.29	7/18/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
925351	12.56	7/21/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
925625	13.33	7/24/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
926172	13.62	7/25/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
926615	14.09	7/26/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
927883	12.76	7/27/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
931084	14.22	8/7/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
932416	13.04	8/9/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
933232	13.43	8/11/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
933810	13.66	8/14/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
935594	15.47	8/17/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
936831	15.06	8/22/2017	Soil	Laraway RDF, Waste Management, Joliet, IL

Table 4
Waste Stream Summary Table
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

<i>Manifest /Ticket#</i>	<i>Quantity (in tons)</i>	<i>Ship Date</i>	<i>Waste Stream</i>	<i>Disposal Facility</i>
937770	15.93	8/23/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
941816	13.76	8/29/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
940041	15.33	9/1/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
941952	13.09	9/5/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
942518	14.16	9/6/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
945956	15.14	9/12/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
946578	15.12	9/13/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
94880	11.39	9/18/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
959184	12.12	9/20/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
951525	13.69	9/22/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
953264	12.51	9/27/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
956759	15.64	10/3/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
957111	16.19	10/3/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
957679	16.01	10/4/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
961440	18.71	10/10/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
961668	18.48	10/10/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
961224	16.95	10/10/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
963390	15.39	10/13/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
963391	13.12	10/13/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
963537	16.15	10/13/2017	Soil	Laraway RDF, Waste Management, Joliet, IL

Table 4
Waste Stream Summary Table
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

<i>Manifest /Ticket#</i>	<i>Quantity (in tons)</i>	<i>Ship Date</i>	<i>Waste Stream</i>	<i>Disposal Facility</i>
963538	17.77	10/13/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
963853	19.9	10/16/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
966082	13.5	10/19/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
967586	15.19	10/24/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
968461	12.98	10/26/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
969072	14.1	10/27/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
970192	13.89	10/30/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
970505	13.73	10/30/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
970785	14.37	10/31/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
976978	12.82	11/10/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
980304	13.11	11/16/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
982875	12.77	11/21/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
985773	14.7	11/28/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
985957	13.19	11/29/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
988543	13.94	12/4/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
990500	13.23	12/6/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
992436	13.16	12/8/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
996636	13.74	12/15/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
997921	15.53	12/19/2017	Soil	Laraway RDF, Waste Management, Joliet, IL
1032003	14.84	4/18/2018	Soil	Laraway RDF, Waste Management, Joliet, IL

Table 4
Waste Stream Summary Table
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

<i>Manifest /Ticket#</i>	<i>Quantity (in tons)</i>	<i>Ship Date</i>	<i>Waste Stream</i>	<i>Disposal Facility</i>
1033160	12.79	4/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1034605	15.2	4/24/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1035962	12.8	4/26/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1037089	13.33	4/30/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1042278	13.14	5/10/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1042844	12.74	5/11/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1045205	13.07	5/17/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1045742	15.09	5/18/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1046546	14.53	5/22/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1046690	15.12	5/23/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1048833	13.3	5/30/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1049275	16.24	5/31/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1051354	12.8	6/5/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1051819	12.69	6/5/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1054620	13.74	6/12/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1056793	14.79	6/15/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1057862	9.31	6/18/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1057974	9.92	6/18/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1057990	8.03	6/18/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058124	12.9	6/18/2018	Soil	Laraway RDF, Waste Management, Joliet, IL

Table 4
Waste Stream Summary Table
Pilsen Soil OU2 Residential Site
Chicago, Cook County, Illinois

<i>Manifest /Ticket#</i>	<i>Quantity (in tons)</i>	<i>Ship Date</i>	<i>Waste Stream</i>	<i>Disposal Facility</i>
1058426	10.07	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058479	9.74	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058490	9.52	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058496	11.33	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058768	10.76	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058801	11.46	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058813	10.95	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1058837	7.77	6/19/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1059174	8.68	6/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1059180	11.03	6/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1059204	9.81	6/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1059218	8.09	6/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1059491	2.01	6/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1064315	14.76	7/3/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1064656	12.91	7/3/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1067061	9.93	7/10/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1067615	13.14	7/11/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1072160	14.92	7/20/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
1072787	9.75	7/23/2018	Soil	Laraway RDF, Waste Management, Joliet, IL
	1536.92		Total	

Notes:

RDF = Recycling and Disposal Facility

Table 5

OU2 Removal Action Summary
OU2 Area of Pilsen - Chicago, Illinois

Property Address	Sample Location	Start	Completion	Est. Total Excavation (CY)	Permanent Marker Installed	Area Width (feet)	Area Length (feet)	Area Size (sq. ft.)	Real Excavation Depth (feet)	Volume (cubic ft.)	Volume (CY)	Backfill Material	Comments
Non-Responsive	Garden	4/17/2018	4/20/2018	25.3	X			342.0	2.0	684.0	25.3	Soil	Approximately 4 inches of soil was removed on west garden. Tree roots dictated excavation depth.
	Front Garden	10/3/2017	10/9/2017	10.8	X	14.0	3.0	42.0	2.0	84.0	3.1	Soil/Sod/Mulch	Front east garden was only excavated one foot because the property owners wanted sod instead. Backyard was sampled at owner request and results were below 400 ppm
	Front Yard				X			208.0	1.0	208.0	7.7		
	Back Yard	7/13/2017	7/13/2017	3.6	X	5.0	19.5	97.5	1.0	97.5	3.6	Gravel	One foot excavated in backyard. Backfilled with gravel. Compacted every 3 inches.
	Front Garden	12/20/2016	12/20/2016		X	3.0	7.0	21.0	1.0	21.0	0.8	Soil	Raised garden on top of concrete. Only 1 foot of soil above concrete. Bagged soil backfill
	Front Yard	4/25/2018	5/7/2018	33.1	X	7.0	12.0	84.0	1.0	84.0	3.1	Gravel Soil & Sod Soil & Mulch Soil & Mulch	Excavated only 10 inches due to PVC line on the south-west side of back yard and back garden. Line currently used as a drain line for gutters that leads to the catch basin. Old ceramic line found at 22 inch mark in garden, slopes down from house.
	Back Yard				X	11.0	32.0	352.0	1.0	352.0	13.0		
	BY Garden				X			194.0	2.0	388.0	14.4		
	Front Yard Garden				X	14.0	2.5	35.0	2.0	70.0	2.6		
	Back Yard	9/19/2017	9/26/2017	23.3	X	26.0	17.0	442.0	1.0	442.0	16.4	Soil/Sod/Mulch	Owner was very attached to the flowers and plants in the back garden. Excavated around plants and sloped away to allow one foot excavation in yard. Bagged dirt was brought in for owners garden.
	Garden				X			188.0	1.0	188.0	7.0	Soil	
	Back Garden	11/8/2017	11/14/2017	15.1	X			203.5	2.0	407.0	15.1	Soil & River Rock	South garden was not fully excavated to the 2 foot mark due to tree roots. East garden contained two trees.
	Back Garden	4/23/2018	4/25/2018	25.8	X	32.0	4.0	128.0	2.0	256.0	9.5	Soil & Bagged Soil Soil & Sod	Soil in yard was sloped towards the alley due to property manager concerned with drainage. Bagged soil was brought into back garden.
	Back Yard				X	21.0	21.0	441.0	1.0	441.0	16.3		
	Back Stairway Soil Area	7/20/2017	7/20/2017	1.3	X	4.0	7.0	28.0	1.0	28.0	1.0	Gravel	Soil in front yard was removed and not replaced due to only 2-3inches of dirt on top of concrete. Owner was OK with no front backfill.
	Front Yard				X	6.0	5.0	30.0	0.3	7.5	0.3	Nothing	
	Back Yard	10/25/2017	11/1/2017	17.8	X	24.0	20.0	480.0	1.0	480.0	17.8	Soil & Sod	Worked around tree and rose vine.
	Back Garden	10/23/2017	11/3/2017	27.9	X			300.0	2.0	600.0	22.2	Soil	Back yard became a garden. Due to large tree roots in garden excavation was done only where possible. Owner wanted soil in front yard because he plans on replacing stairs leading to sidewalk.
	Front Yard				X	11.0	14.0	154.0	1.0	154.0	5.7	Soil	
	Front Yard				X			0.0		0.0	0.0		
	Front Yard	12/12/2017	5/4/2018	21.3	X	10.0	16.5	165.0	1.0	165.0	6.1	Soil & Sod	North side of building was excavated 3 inches and replaced with gravel. Two patches of dirt in front were excavated 3 inches and replaced with gravel. USEPA concerned with exposure and easy access.
	Back Yard				X	51.5	6.8	347.6	1.0	347.6	12.9	Soil & Sod	
	Side Strip					50.0	5.0	250.0	0.3	62.5	2.3	Gravel	
	Back yard	10/26/2017	11/3/2017	10.4	X	14.0	20.0	280.0	1.0	280.0	10.4	Soil & Sod	Slopped away from tree and rose vine
	Back Deck	10/26/2017	11/8/2017	24.4	X			108.0	1.0	108.0	4.0	Gravel	Front yard was excavated two feet due to owner using it as a garden.
	Front Yard				X	14.5	14.0	203.0	2.0	406.0	15.0	Soil	
	Garden				X			127.0	2.0	254.0	9.4	Soil	
	Front Yard					12.0	6.0	72.0	1.0	72.0	2.7	Soil & Sod	
	Front Yard Garden	10/30/2017	11/8/2017	10.4	X			105.0	2.0	210.0	7.8	Soil	Front garden was excavated only to 18 inches due to XRF scan.
	Back Garden	5/29/2018	6/1/2018	28.5	X	4.0	14.0	56.0	2.0	112.0	4.1	Soil	Side yard was broken into two sections, back and front section. Back section still had trees and 6 inches of soil was only excavated where possible. Back section was backfilled with soil. Front section was excavated 1 foot and backfilled with gravel. Backyard was backfilled only up to the 8 inch mark. Property owner wanted space for his permeable pavers.
	Front Garden				X	13.0	12.0	156.0	2.0	312.0	11.6	Soil	
	Side Yard				X	57.0	1.0	57.0	1.0	57.0	2.1	Gravel & Soil	
	Back Yard				X	17.0	17.0	289.0	1.0	289.0	10.7	Gravel	
	Back Yard	5/10/2018	5/16/2018	24.9	X			650.0	1.0	650.0	24.1	Soil/Sod/Mulch/Gravel	Back garden and front strip of dirt was scanned with XRF and results were below the cleanup levels. Excavation around trees was limited due to tree roots.
	Back Yard	11/27/2017	11/30/2017	22.0	X	19.0	23.0	437.0	1.0	437.0	16.2	Soil & Sod	Garden was added by owner.
	Back Garden				X	2.0	39.0	78.0	2.0	156.0	5.8	Soil	
	Garden	12/1/2017	12/4/2017	9.7	X			131.3	2.0	262.5	9.7	Soil	Electric line runs through garden at 6 inches. Excavation sloped away from line.
	Back Yard	8/21/2017	9/8/2017	48.8	X	47.0	25.0	1175.0	1.0	1175.0	43.5	Soil/Sod/Gravel	Back yard was broken up into two sections, under deck and back yard. Under deck was only excavated 6 inches due to deck supports and backfilled with gravel (weed fabric was replaced). Side strip was scraped (3 inches) and replaced with gravel. Front yard on north side had a small garden that was excavated the 2 feet and backfilled with soil and finished with mulch.
	Front Yard				X	13.0	11.0	143.0	1.0	143.0	5.3	Soil & Sod	
	Front Yard	9/11/2017	9/14/2017	28.4								Below 400 ppm	Front yard was resampled due to new pavers and garden area. Results came back below cleanup levels. Back gardens were added by owner.
	Back Yard				X			524.3	1.0	524.3	19.4	Soil & Sod	
	Back Gardens				X			121.0	2.0	242.0	9.0	Soil	
	Front Yard	8/21/2017	8/31/2017	19.0	X			71.5	1.0	71.5	2.6	Soil/Sod/Mulch	Gardens were added by property owner in back yard and north side of front yard.
	Back Yard				X			280.0	1.0	280.0	10.4	Soil & Sod	
	Back Garden				X			81.0	2.0	162.0	6.0	Soil & Mulch	
	Front Yard	--	--					0.0		0.0	0.0	Below 400 ppm	Property was resampled due to construction of a new building on lot. Results came back below clean up levels.
	Under Deck	6/28/2017	6/28/2017	2.8	X	3.5	20.0	70.0	1.0	70.0	2.6	Gravel	New stairs were built by owner. Slopped away from stair supports.
	Back Garden				X	5.0	1.0	5.0	1.0	5.0	0.2	Gravel	
	Back Yard	9/15/2017	9/20/2017	7.0	X	11.5	16.5	189.8	1.0	189.8	7.0	Soil & Sod	Rotted tree stump removed from North-East Corner.

Table 5

OU2 Removal Action Summary
OU2 Area of Pilsen - Chicago, Illinois

Property Address	Sample Location	Start	Completion	Est. Total Excavation (CY)	Permanent Marker Installed	Area Width (feet)	Area Length (feet)	Area Size (sq. ft.)	Real Excavation Depth (feet)	Volume (cubic ft.)	Volume (CY)	Backfill Material	Comments
Non-Responsive	Back Yard	6/16/2017	6/22/2017	34.2	X	26.0	21.0	546.0	1.0	546.0	20.2	Soil/Sod/Gravel	Back yard was broken up into two sections, under stairs and backyard. Excavation under stairs was limited due to supports and catch basin, this area was backfilled with gravel.
	Garden				X	21.0	9.0	189.0	2.0	378.0	14.0	Soil & Mulch	
	Garden	9/15/2017	9/18/2017	4.6	X			62.3	2.0	124.5	4.6	Soil	
	Back Yard	6/23/2017	6/27/2017	15.6	X	20.0	21.0	420.0	1.0	420.0	15.6	Soil/Sod/Mulch	
	Side Garden	7/7/2017	7/11/2017	11.4	X	60.0	2.0	120.0	2.0	240.0	8.9	Soil	
	Mid Garden				X			33.8	2.0	67.5	2.5	Soil	Side garden was excavated to 2 foot mark where there was no column. Due to structure stability of the columns only 3 inches of soil was removed in front of them.
	Back Yard	12/21/2016	12/21/2016	8.2	X	10.0	22.0	220.0	0.2	44.0	1.6	Gravel	Due to risk of damaging retaining wall only removed a few inches of gravel then backfilled with 1 foot of new gravel.
	Front Garden	5/5/2017	5/9/2017	11.1	X	3.0	5.0	15.0	2.0	30.0	1.1	Soil	Gardens surrounding front yard were only excavated one foot (owners orders). West garden was only excavated 9 inches due to fence supports. Gravel area by front yard was scanned with an XRF was below action level. Gravel area was only excavated 6 inches due to a uniform layer of bricks throughout the area.
	Garden				X			130.6	1.0	130.6	4.8	Gravel	
	Gravel Area	8/9/2017	8/9/2017			14.0	20.0	280.0	0.5	140.0	5.2	Gravel	
	Front Yard	7/11/2017	7/12/2017	4.9	X			133.0	1.0	133.0	4.9	Soil & Sod	Backyard (2.5 foot strip of soil between garage and alley) was completed in 2016. Back Garden was completed in 2017. Back Garden was only excavated 18 inches due to finding drain.
	Back Garden	8/9/2017	8/9/2017	6.0	X			50.3	2.0	100.5	3.7	Soil	
	Back Yard	12/21/2016	12/21/2016		X	25.0	2.5	62.5	1.0	62.5	2.3	Gravel	
	Side Garden	11/15/2017	11/16/2017	11.9	X	43.0	2.5	107.5	2.0	215.0	8.0	Soil	
	Side Yard				X	43.0	2.5	107.5	1.0	107.5	4.0	Gravel	
	Back Yard	12/20/2016	12/20/2016	1.3	X	4.0	9.0	36.0	1.0	36.0	1.3	Gravel	Back yard along stairs, portion of excavation limited due to tree roots.
	Back Yard	--	--	--	X			0.0		0.0	0.0		Self Remediated with concrete
	Back Yard Center	8/17/2017	8/18/2017	12.1	X	11.5	16.0	184.0	1.0	184.0	6.8	Gravel	Excavation next to driveway was limited due to tree roots. Approximately 6 inches was removed and backfilled with soil and topped off with mulch.
	Back Yard Perimeter				X	7.5	19.0	142.5	1.0	142.5	5.3	Gravel	
	Back Yard	12/1/2017	12/4/2017	2.0	X	21.0	2.0	42.0	1.0	42.0	1.6	Gravel	Excavation limited by tree roots
	Under Garage							24.0	0.5	12.0	0.4	Soil/Mulch	
	Garden	4/24/2017	4/25/2017	3.9	X	3.5	15.0	52.5	2.0	105.0	3.9	Soil	Front yard and back yard were paved by owner. New back yard was considered the south side of the garage. Garden under stairs leading to house was only excavated 14 inches due to supports. Front gardens were slopped away from the supports holding the front sidewalk.
	Back Garden	5/9/2017	5/19/2017	29.5	X			212.0	2.0	424.0	15.7	Soil	Diffrentent layers of backfill were used due to owner changing his mind.
	Front Garden				X			128.0	2.0	256.0	9.5	Soil	
	Back Yard				X			117.0	1.0	117.0	4.3	Gravel	
	Front Yard							0.0		0.0	0.0	--	
	Back Yard	5/18/2017	5/2/2018	18.3	X	21.5	23.0	494.5	1.0	494.5	18.3	Soil/Gravel/Mulch/Sod	Two separate garden areas in property. The perimeter garden was below 400 ppm. Inner garden was excavated.
	Front Garden	6/12/2017	6/16/2017	37.3	X			503.0	2.0	1006.0	37.3	Soil	Owner uses one side of the backyard as a garden.
	Back Yard	5/22/2017	5/26/2017	26.1	X	10.0	22.0	220.0	1.0	220.0	8.1	Soil & Mulch	
	Back Garden				X	11.0	22.0	242.0	2.0	484.0	17.9	Soil	Soil strip on north side of garage was scraped and backfilled with gravel. Areas with river rock in back and front were given an extra layer of rock to cover.
	Back Yard	5/26/2017	6/2/2017	12.2	X			338.0	1.0	338.0	12.5	Soil/Sod/Gravel	
	Front Garden				X			12.6	2.0	25.1	0.9	Soil	
	Back Garden				X	7.0	5.0	35.0	1.0	35.0	1.3	Soil	
	Back Parking	10/10/2017	10/21/2017	40.4	X	21.0	52.0	1092.0	1.0	1092.0	40.4	Gravel/Sod/Soil	Back was broken into two areas, sod area and gravel area. Whole back area was excavated 1 foot. Sod area was located on North-West corner of property (22'X13'). Rest of the property was backfilled with gravel.
	Back Yard	8/4/2017	8/8/2017	30.5	X	21.5	14.5	311.8	1.0	311.8	11.5	Gravel	Back Garden was only excavated 20 inches. XRF scan confirmed clean depth. No demarcation barrier placed. Backfilled with soil and finished off with mulch.
	Front Yard				X	23.0	8.5	195.5	1.0	195.5	7.2	Gravel	
	Back Garden							157.5	2.0	315.0	11.7	Soil & Mulch	
	Back Yard	7/14/2017	7/28/2017	34.6	X	21.0	43.0	903.0	1.0	903.0	33.4	Soil & Sod	Removed 5 inches on side strip running adjacent to east fence. Side strip was not sampled. Front yard was not remediated nor sampled due to no access and owners request.
	Side Strip					64.0	1.0	64.0	0.5	32.0	1.2	Soil	
	Back Garden	7/21/2017	8/3/2017	66.8	X			181.3	2.0	362.5	13.4	Soil	Gardens east of driveway had concrete 8 inches below. Garden running adjacent to east fence was excavated to 18 inches due to concrete. Sloped away from house, catch basin and air conditioner. Whole backyard became garden.
	Back Yard				X	36.0	20.0	720.0	2.0	1440.0	53.3	Soil	
	Back Yard	11/17/2017	11/22/2017	20.9	X	25.0	19.0	475.0	1.0	475.0	17.6	Gravel/Soil/Sod	Garden was moved from the north side of the property (adjacent to the driveway) to the west side of property (adjacent to neighboring fence).
	Back Garden				X	3.0	15.0	45.0	2.0	90.0	3.3	Soil	
	Back Yard	8/10/2017	8/16/2017	47.3	X	30.0	20.0	600.0	1.0	600.0	22.2	Soil & Sod	
	Back Garden				X			339.0	2.0	678.0	25.1	Soil	

Table 5

OU2 Removal Action Summary
OU2 Area of Pilsen - Chicago, Illinois

Property Address	Sample Location	Start	Completion	Est. Total Excavation (CY)	Permanent Marker Installed	Area Width (feet)	Area Length (feet)	Area Size (sq. ft.)	Real Excavation Depth (feet)	Volume (cubic ft.)	Volume (CY)	Backfill Material	Comments
Non-Responsive	Back Yard	7/5/2017	7/17/2007	10.0	X			103.5	2.0	207.0	7.7	Dirt	Front yard was not sampled due to the lack of access and amount of debris. It was agreed (USEPA) that bricks and debris in front yard will be leveled out, covered with a weed fabric, and backfilled with approximately 6 inches of clean dirt. Some parts of the back garden were restricted to excavation due to the tree roots. Found ceramic line @ approximately 16 inches below, running north-south on east side of back garden.
	Front Yard/Space					8.5	15.0	127.5	0.5	63.8	2.4	Dirt	
	Back Garden	6/29/2017	7/14/2017	23.0	X			310.0	2.0	620.0	23.0	Soil	West garden was excavated one foot then XRF. 3 point composite and 5 trials with XRF, average of 89.14 ppm. Soil was sent for analyses and came back below 400 ppm. East Garden was excavated the two feet. Both gardens were backfilled with clean dirt. A revisit was required due to owner not liking the content of the soil. Bagged soil from the store was brought in and tilled into both gardens.
	Back Yard	6/29/2018	7/9/2018	21.7	X			585.5	1.0	585.5	21.7	Soil & Sod	Only excavated 8 inches but backfilled with 12 inches throughout backyard. Original grade was 4 inches below the sidewalk.
	Side Strip	6/8/2018	6/8/2018	2.8	X	76.0	1.0	76.0	1.0	76.0	2.8	Gravel & Dirt	A small area was left with dirt (1X20). Whole area was only excavated to one foot due to footing of building.
		--	--										Owner refused access
		--	--										Inspected with green space but owner refused access
		--	--										Inspected with green space but owner refused access
		--	--										Inspected with green space but owner refused access
		--	--										Inspected and no green space
		--	--										Owner stated that current soil was brought in from another location. Back soil strip had an additional sample point underneath van, north end of property which was below 400
		--	--										Lead > 400 ppm with refusal access from owner
	Back Garden	12/7/2017	12/13/2017	13.6	X	13.5	2.5	33.8	2.0	67.5	2.5	Soil	Front yard was scraped and backfilled with soil. No easy access for sampling and limited due to space and tree roots.
	Back Yard				X	15.0	20.0	300.0	1.0	300.0	11.1	Soil & Seeded Mat	
	Upper Terrace (Yard)	6/5/2017	6/8/2017	28.3	X	22.0	4.5	99.0	1.0	99.0	3.7	Gravel	Terraces were sampled as gardens but were only excavated one foot due to owners request. Owner will be building a garage in the near future.
	Mid Terrace (Yard)				X	22.0	13.0	286.0	1.0	286.0	10.6	Gravel	
	Back Yard				X	21.0	18.0	378.0	1.0	378.0	14.0	Gravel	
	Front Yard	6/4/2018	6/7/2018		X	18.5	21.5	397.8	1.0	397.8	14.7	Soil/Sod/Mulch	Gardening edging around garden was replaced. Mulch around tree was replaced.
	Front Garden				X			249.5	2.0	499.0	18.5	Soil	Excavation in front yard was limited due to large tree roots. Excavation limited in north
		--	--										Inspected and no green space
		--	--										Inspected and no green space
		--	--										Sampled with results below cleanup levels. Area used as parking spots was not sampled due to thick layer of gravel. Property owner mentioned a building use to reside were the parking spots are now. Building was torn down and the rubble was just spread throughout the parking spots.
	Front Yard	4/25/2017	5/5/2017	34.2	X			924.0	1.0	924.0	34.2	Soil & Sod	
		--	--										Lead > 400 ppm with refusal access from owner
	Back Yard	9/20/2017	9/28/2017	16.9	X	24.0	19.0	456.0	1.0	456.0	16.9	Soil & Sod	Limited excavation around trees due to roots
	Back Yard	6/13/2018	6/28/2018	31.1	X	39.0	21.5	838.5	1.0	838.5	31.1	Soil/Sod/Gravel	Gravel area was added by owner after excavation was done.
	Back Yard	5/8/2018	5/14/2018	16.2	X	23.0	15.0	345.0	1.0	345.0	12.8	Soil/Mulch/Gravel	Front garden was only excavated approximately 10 inches due to concrete and debris.
	Front Yard				X	8.2	11.3	92.3	1.0	92.3	3.4	Soil & Gravel	
	Back Garden	7/3/2018	7/6/2018	12.3	X			210.8	1.0	210.8	7.8	Gravel	Back garden and paved area became one area. This area was excavated one foot and backfilled with gravel. Back yard (under stairs) excavation was limited due to work space and structural supports.
	Back Yard				X	24.0	5.0	120.0	1.0	120.0	4.4	Gravel	
	Back Yard	6/13/2018	6/28/2018	12.3	X	19.5	17.0	331.5	1.0	331.5	12.3	Soil & Sod	Slope away from building.
	North Yard	6/13/2018	6/28/2018	111.1	X	67.0	24.0	1608.0	1.0	1608.0	59.6	Soil & Sod	Owner wanted a garden area after excavation was complete and backfilling had begun. Area is located on north west side of property (next to gravel driveway). Owner was made aware of demarcation barrier at one foot mark.
	South Yard				X	54.0	24.0	1296.0	1.0	1296.0	48.0	Soil & Sod	
	Garden				X	3.0	16.0	48.0	2.0	96.0	3.6	Soil	
	Back Yard	7/9/2018	7/12/2018	31.2	X	32.5	21.0	682.5	1.0	682.5	25.3	Soil/Sod/Gravel	
	Back Garden				X	3.8	21.0	80.4	2.0	160.9	6.0	Soil	
		--	--										Inspected with green space but owner refused access
		--	--										Inspected with green space but owner refused access
		--	--										Sampled and below 400 ppm
		--	--										Sampled and below 400 ppm
		--	--										Sampled and below 400 ppm
	Front Yard	12/5/2017	12/6/2017	9.3	X	20.0	12.5	250.0	1.0	250.0	9.3		Excavation sloped away from walkway supports
	Garden	10/12/2017	10/18/2017	78.9	X	3.0	71.0	213.0	2.0	426.0	15.8	Soil	
	Front Yard				X	24.0	71.0	1704.0	1.0	1704.0	63.1	Soil & Sod	

Table 5

OU2 Removal Action Summary
OU2 Area of Pilsen - Chicago, Illinois

Property Address	Sample Location	Start	Completion	Est. Total Excavation (CY)	Permanent Marker Installed	Area Width (feet)	Area Length (feet)	Area Size (sq. ft.)	Real Excavation Depth (feet)	Volume (cubic ft.)	Volume (CY)	Backfill Material	Comments
Non-Responsive	Back Yard	5/17/2018	5/25/2018	42.4	X	47.0	22.0	1034.0	1.0	1034.0	38.3	Gravel & River Rock	River Rock and Weed Fabric was replaced in backyard.
	Front Yard				X	20.0	5.5	110.0	1.0	110.0	4.1	Gravel	
	Back Yard	6/11/2018	6/13/2018	17.2	X			465.0	1.0	465.0	17.2		Limited excavation around trees due to tree roots
	Back Yard	--	--										Inspected with green space but owner refused access
	Back Yard	--	--										Inspected with green space but owner refused access
		--	--										Inspected with no green space. No access agreement
		--	--										Inspected with no green space. No access agreement
	Back Yard	--	--										Sampled and below 400 ppm
	Front Yard												
		--	--										Agreement with USEPA that property does not have green space due to the engineered barrier. No further action required.
	Grass Area	--	--										Sampled and below 400 ppm
	Front Garden	--	--										Sampled and below 400 ppm
	Back Garden												
		--	--										Sampled and below 400 ppm
	Front Yard	9/29/2017	10/9/2017	26.9		7.0	19.0	133.0	1.0	133.0	4.9	Soil & Sod	Slope away from gardens in both front yard and back yard.
	Back Yard							594.0	1.0	594.0	22.0	Soil & Sod	

CY - cubic yards
Est. Estimated
ppm - parts per million
sq .ft. - square feet
XRF - X-ray Fluorescence Analyzer

APPENDIX E
ENVIRONMENTALLY PREFERRED PRACTICES

TO-TOLIN #:	F0069-0002AI013
Site Name:	Pilsen Soil OU2 Residential Site
Site City, State:	Chicago, IL
Site Project Manager:	Paul Pallardy
EPA OSC:	Ramon Mendoza

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N= Not Used	N/A= Not Applicable	Y = Yes Implemented	Comments Section Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Energy				
Use of Energy Efficient Equipment				
Computer Equipment (FEMP/Energy Star)			X	
Installation of Electric Service		X		No site trailer at staging area
Reduce Carbon Emissions from Transportation				
Use Internet Based Meetings/Conferences			X	
Maximize Carpooling		X		Only 1 START on site per day
Use of Local Labor/Suppliers/Waste Disposal Facilities (50 mile radius)			X	
No idling, except for extreme weather conditions			X	
Use of Alternative Fuels, if available within 10 miles		X		Rental cars utilized, no option for alternative fuels
Properly Inflated Tires			X	
Email Small Files (less than 8MB)			X	
Reusable Electronic Storage Media or the Cloud			X	
Water				
Use of Low Flow Sampling Pumps		X		No groundwater sampling conducted
Waste				
Use of Local Recycling Programs			X	Local recycling used as needed
Use of Rechargeable Batteries			X	All equipment, computers, utilized rechargeable batteries
Recycling – Other			X	Collected all recyclables for local recycling
Plastic Reduction			X	As much as possible
Reuse of Resources			X	As much as possible
Direct Push Boring		X		Not utilized for sample collection as it was only surficial soil
Materials				
Printing when Required				
Double-sided Printing			X	
100% post-consumer recycled paper			X	

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N = Not Used	N/A = Not Applicable	Y = Yes Implemented	Comments Section Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Land & Ecosystems				
Minimize Disruption to Natural Vegetation			X	Soil sampling with trowel, sample point restored to previous condition with soil or grass following sample collection.
Use of Non-invasive Investigation Techniques			X	Soil sampling with trowel, sample point restored to previous condition with soil or grass following sample collection.
Environmentally Preferred				
Green Procurement				
Environmentally Preferred Vendors			X	
Green Lodging/Hotels		X		
Use of Green Laboratories			X	

TO-TOLIN #:	F0069-0002AI013
Site Name:	Pilsen Soil OU2 Residential Site
Site City, State:	Chicago, IL
Site Project Manager:	Paul Pallardy
EPA OSC:	Ramon Mendoza

Green Metrics		
Metric	Amount	Unit of Measure
Diesel Fuel Used	0	gallons
Distance Traveled ¹	928.80	Miles
Unleaded Fuel Used ²	35.32	gallons
Alternative/E-85 Fuel Used	0	gallons
Electricity from Coal	0	kW
Electricity from Natural Gas	0	kW
Electricity from solar/wind	0	kW
Electricity from grid/mix	0	kW
Solid waste reused	0	lbs
Solid waste recycled	10	lbs
Water Used	20	gallons

Greenhouse Gas Emissions (Site Specific)					
Source	Amount Used	Unit of Measure	Methane (CH ₄) (Grams) ³	Nitrous Oxide (N ₂ O) (Grams) ³	Carbon Dioxide (CO ₂) (Kilograms) ³
Gasoline	35.32	X gallons	6.13	15.14	314.70
Diesel		X gallons			
E-85		X gallons			
Electricity Office		X Kilowatts			
Natural Gas		X Therms			
Solid Waste		X lbs			
Other		X Unit of Measure			

Note:

¹ Distance traveled based on number of trips between the Pilsen Soil OU2 Residential site in the Pilsen Neighborhood of Chicago, IL and the Tetra Tech Chicago Office (3.6 miles) in a large sport utility vehicle, which was required for cargo space. A total of 258 trips were made by 1 Tetra Tech personnel totaling 928.8 miles.

² Fuel consumption based on distance traveled in a large sport utility vehicle. An average fuel efficiency of 26.3 miles per gallon was assumed based on 2014 light duty truck fuel efficiency from "Average Fuel Efficiency of U.S. Light Duty Vehicles," U.S. Department of Transportation, Bureau of Statistics Table 4-23 (Accessed online at http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/html/table_04_23.html on December 9, 2016).

³ Methane and nitrous oxide emissions based on emission factors of 0.0066 and 0.0163 grams per mile for EPA Tier 2 light duty gasoline trucks from "Voluntary Reporting of Greenhouse Gases Program, Fuel Emission Coefficients, Table 5" (Accessed online at <http://205.254.135.7/oiaf/1605/coefficients.html> on December 9, 2016)

⁴ Carbon dioxide emissions based on emission factors of 8.91 kilograms carbon dioxide per gallon of gasoline and 10.15 kilograms carbon dioxide per gallon of diesel fuel from "Voluntary Reporting of Greenhouse Gases Program, Fuel Emission Coefficients, Table 2" (Accessed online at <http://205.254.135.7/oiaf/1605/coefficients.html> on November 14, 2016).

START implemented environmentally preferred practices to maximize sustainability; reduce energy, water use, and toxic air emissions; promote carbon neutrality; and encourage industrial material reuse and recycling. In accordance with contract requirements, U.S. Environmental Protection Agency (EPA) policies, and relevant guidance, START documented project-specific environmentally preferred practices and available metrics in the Environmental Field Practices Checklist, Environmental Office Practices Checklist, and Green Metrics Table (ASTM International 2016; EPA 2012a, 2012b, and 2016).

References:

- ASTM International (ASTM). 2016. "Standard Guide for Greener Cleanups." E2893-16. April 1.
- EPA. 2012a. "Methodology for Understanding and Reducing a Project's Environmental Footprint." Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation. EPA 542-R-12-002. February.
- EPA. 2012b. "U.S. EPA Region 5 Superfund Greener Cleanup Implementation Strategy." March 16.
- EPA. 2016. Memorandum Regarding Consideration of Greener Cleanup Activities in the Superfund Cleanup Process. From Woolford, James, Director, *et. al.* To Regional Superfund National Program Managers and Regional Counsels, Regions 1 – 10. August 2.

ATTACHMENT 1
INDUSTRIAL HYGIENE EXPOSURE STUDY REPORT



INDUSTRIAL COMMERCIAL ACADEMIC HEALTHCARE

INDUSTRIAL HYGIENE EXPOSURE STUDY HYGIENEERING PROJECT #: 2016-3320-IH

PREPARED FOR:

**R.W. COLLINS COMPANY
7225 WEST 66TH STREET
CHICAGO, ILLINOIS 60638**

DECEMBER 20TH AND 21ST, 2016

PREPARED BY:

**HYGIENEERING, INC.
7575 PLAZA COURT
WILLOWBROOK, IL 60527**

DATE SUBMITTED: JANUARY 12, 2017

Asbestos, Mold & Lead Services

Asbestos, Mold and Lead Surveys
Air and Bulk Sampling
Abatement Project Design
Bid Solicitation
Project Management
Turnkey Services
Operations & Maintenance Programs

Indoor Air Quality Services

IAQ Investigations and Testing
HVAC System Inspection
IAQ Training & Management
Programs for Facilities
Mold Management Services

Industrial Hygiene Services

Worker Exposure Assessments
Air Sampling for Chemical, Physical
& Biological Contaminants
Noise Levels Surveys
Ventilation Surveys
PPE Assessments

Safety Consulting Services

Safety Program Development
Safety Program Auditing
Safety Training for Construction
& General Industry
Process Safety Management/ Hazard
Analysis Development
Risk Management Planning & PSM
Compliance Reviews
Temporary Safety Prof. Staffing

Environmental Eng. Services

Phase I & II Env. Site Assessments
Underground Storage Tanks
Emergency Response, Testing &
Remediation
Subsurface Investigations
(Soil/Groundwater)
Hazardous Waste Management
Environmental Compliance Audits
Environmental Risk Assessments
Environmental Permitting and
Reporting
Remediation Design
Remediation Management

Training Services

OSHA Safety Topics
10-Hour Con & Gen Industry
All EPA & OSHA Topics
Asbestos/HAZWOPER & Lead

Emergency Response

Floods, Fires, Chemical Releases
Site Hazard Characterization
Project Management (Turnkey)



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND.....	1
OBJECTIVE / SCOPE OF WORK.....	1
SUMMARY OF AIR SAMPLING RESULTS – LEAD & ARSENIC.....	1
RECOMMENDATIONS.....	1
DISCUSSION OF FINDINGS	3
INTRODUCTION	3
OBJECTIVES / SCOPE OF WORK.....	3
SAMPLING METHODOLOGY.....	3
<i>Sampling Strategy - Air</i>	3
<i>Sample Evaluation Criteria - Air</i>	4
PERSONAL AIR SAMPLE RESULTS – LEAD & ARSENIC	4
RECOMMENDATIONS	6
REPORT APPLICABILITY	6
Appendices	
Appendix 1 – Industrial Hygiene Air Sampling Data Sheets	
Appendix 2 – Laboratory Analytical Results – Air Samples	
Appendix 3 – Employee Notification Letters	



EXECUTIVE SUMMARY

Background

Hygieneering, Inc. (Hygieneering) was retained by R.W. Collins Company (R.W. Collins) to conduct an industrial hygiene study at 1345 West 21st Street in Chicago, Illinois on December 20th and 21st, 2016. R.W. Collins was engaged to perform soil remediation near railway railroad tracks and associated railroad ties from multiple hazardous waste sites at the Pilsen Railroad Spur & Alley remediation project.

This study was conducted to quantify employee exposure to lead and arsenic during R.W. Collins activities during remediation operations. Hygieneering and R.W. Collins collectively determined employees to sample for each work shift.

Maira Garcia, Safety & Health Technician, of Hygieneering performed fieldwork. Kevin Konkey, CSP, CET, CHMM, Vice President, Safety and Industrial Hygiene Services, was the senior project manager. Josh Bernat, Estimator for R.W. Collins, provided project coordination. Steve Huscher of R.W. Collins provided the onsite assistance.

Objective / Scope of Work

The objective / scope of work for this project was as follows:

- Collect up to two (2) full-shift personal air samples for arsenic and lead, each shift onsite.

The results of this study were to assist in determining whether a hazard exists and to document employee exposure levels relative to Occupational Safety & Health Administration (OSHA) time weighted average (TWA) action levels (AL) and permissible exposure limits (PEL) under OSHA 29 Code of Federal Regulation (CFR) 1926.1118 “Arsenic” and 1926.62 “Lead” regulations.

Summary of Air Sampling Results – Lead & Arsenic

Personal air sample results were evaluated using the Occupational Safety and Health Administration (time weighted average (TWA) action levels (AL) and permissible exposure limits (PEL) to determine regulatory compliance. The American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) were used as recommended industry guidelines.

Personal Air Samples

Personal time weighted average (TWA) exposures were below OSHA PELs and ALs and ACGIH TLVs for lead and arsenic on all employees sampled.

These results are discussed in more detail within the text of this document. Detailed industrial hygiene air sampling data sheets are presented in **Appendix 1** and laboratory analytical results are in **Appendix 2**. Employee notification letters are presented in **Appendix 3**.

Recommendations

The following recommendations are provided for your consideration:

- Per 1926.62(d)(8)(i) “Lead” regulation employers must, as soon as possible but no later than 5 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to employees. Employee notification letters have been provided in **Appendix 3** to assist in communicating results.
- OSHA’s construction standard 1926.1118 for Arsenic is identical to those set forth in the general industry regulation 1910.1018 for Arsenic. Thus the general industry regulation must be referenced to



determine regulatory requirements. Per 1910.1018(e)(5)(i) “Arsenic” regulation employers must, within 15 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to affected employees. Employee notification letters have been provided in **Appendix 3** to assist in communicating results.

- Consider further industrial hygiene evaluations if there are any changes in current operations, which may lead to higher or additional exposures. Additional exposure assessments during differing field conditions, weather conditions and on a periodic basis will provide further characterization of future employee exposures as well as the effectiveness of engineering controls, and employee work practices in reducing worker exposures.



DISCUSSION OF FINDINGS

Introduction

Hygieneering, Inc. (Hygieneering) was retained by R.W. Collins Company (R.W. Collins) to conduct an industrial hygiene study at 1345 West 21st Street in Chicago, Illinois on December 20th and 21st, 2016. R.W. Collins was engaged to perform soil remediation near railway railroad tracks and associated railroad ties from multiple hazardous waste sites at the Pilsen Railroad Spur & Alley remediation project.

This study was conducted to quantify employee exposure to lead and arsenic during R.W. Collins activities during remediation operations. Hygieneering and R.W. Collins collectively determined employees to sample for each work shift.

Maira Garcia, Safety & Health Technician, of Hygieneering performed fieldwork. Kevin Konkey, CSP, CET, CHMM, Vice President, Safety and Industrial Hygiene Services, was the senior project manager. Josh Bernat, Estimator for R.W. Collins, provided project coordination. Steve Huscher of R.W. Collins provided the onsite assistance.

Objectives / Scope of Work

The objectives / scope of work for this project was as follows:

- Collect up to two (2) full-shift personal air samples for arsenic and lead, each shift onsite.

The results of this study were to assist in determining whether a hazard exists and to document employee exposure levels relative to Occupational Safety & Health Administration (OSHA) time weighted average (TWA) action levels (AL) and permissible exposure limits (PEL) under OSHA 29 Code of Federal Regulation (CFR) 1926.1118 “Arsenic” and 1926.62 “Lead” regulations.

Sampling Methodology

Sampling Strategy - Air

Personal air samples were collected using low-flow air sampling pumps. The flow rates of the pumps were calibrated with representative collection media in line before and after the sampling period. Personal air sample inlets were attached to the employee’s breathing zones via tygon tubing from the pump. This sampling methodology is considered representative by OSHA to determine actual employee exposures. Air sampling was conducted in accordance with established industrial hygiene practices and Occupational Safety and Health Administration (OSHA) standards. Representative full shift samples were collected to evaluate employees’ exposures to airborne contaminants determined by Compliance One and Hygieneering.

TestAmerica Cedar Falls (Lab ID101044) is accredited by the American Industrial Hygiene Association Laboratory Accreditation Programs (AIHA-LAP), analyzed the air samples. Practices and procedures used by this laboratory conform to the recommended methods developed by the National Institute of Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA).

The table below illustrates collection and analysis details regarding the air samples collected during this assessment:

Contaminant(s)	Media	Flow Rate	Analytical Method
Lead & Arsenic	3 Piece 37mm UW MCE Filter	2.0 liters/min	Modified NIOSH 7300 / Modified OSHA ID – 125G



Sample Evaluation Criteria - Air

Personal air sample results were evaluated using the Occupational Safety and Health Administration (time weighted average (TWA) action levels (AL) and permissible exposure limits (PEL) to determine regulatory compliance. The American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) were used as recommended industry guidelines.

PELs and TLVs are airborne contaminant concentration limits that are carefully selected below the level it is believed that a healthy worker can be repeatedly exposed, eight hours a day, over a working lifetime without experiencing adverse health effects.

ALs are used by OSHA to express a health or physical hazard. They indicate the level of a harmful or toxic substance / activity that requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring.

A PEL is a regulatory limit and represents the maximum allowable concentration of a contaminant to which an employee can be exposed during the workday. Both the PEL and TLV are comparable limits, though TLVs are recommended values, which cannot be legally enforced. PELs and TLVs can be established as a full-shift Time Weighted Average (TWA) exposure, Short Term Exposure Level (STEL), or Ceiling Limit.

TLVs are reviewed and revised annually to incorporate the latest scientific data, including; industrial experience, experimental human and animal studies and when possible, and a combination of the three. TLVs are used by professionals as guidelines and do not represent a strict separation between safe and hazardous occupational exposures.

Personal Air Sample Results – Lead & Arsenic

The following appendices present detailed sample data collection information and laboratory data:

Appendix 1 – Industrial Hygiene Air Sampling Data Sheets

Appendix 2 – Laboratory Analytical Results – Air Samples

Appendix 3 – Employee Notification Letters

Personal time weighted average (TWA) exposures were below OSHA PELs and ALs and ACGIH TLVs for lead and arsenic for all employees sampled.



The following table provides a summary of results of the personal air samples taken December 20, 2016:

Sample Number	Employee Name	Date	Contaminant	Measured Concentration (mg/m ³)	TWA Concentration (mg/m ³)	Exposure Standard		
						OSHA AL (mg/m ³)	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
P-1	Bob Ringberg	12/20/2016	Lead	0.00105	0.00085	0.03	0.05	0.05
			Arsenic	<0.00188	None-Detected	0.005	0.01	0.01
P-2	Edward Olmos	12/20/2016	Lead	0.000605	0.00049	0.03	0.05	0.05
			Arsenic	<0.00187	None-Detected	0.005	0.01	0.01

OSHA – Occupational Safety & Health Administration
TWA – Time Weighted Average
ACGIH - American Conference of Industrial Hygienists
mg/m³ – milligrams per cubic meter
Bold – Exceeded Exposure Standard

PEL - Permissible Exposure Limit
AL – Action Level
TLV - Threshold Limit Values
< - Less Than

The following table provides a summary of results of the personal air samples taken December 21, 2015:

Sample Number	Employee Name	Date	Contaminant	Measured Concentration (mg/m ³)	TWA Concentration (mg/m ³)	Exposure Standard		
						OSHA AL (mg/m ³)	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
P-3	Rosendo Calvo	12/21/2016	Lead	0.000615	0.00044	0.03	0.05	0.05
			Arsenic	<0.00221	None-Detected	0.005	0.01	0.01
P-4	Bob Ringberg	12/21/2016	Lead	<0.000405	None-Detected	0.03	0.05	0.05
			Arsenic	<0.00219	None-Detected	0.005	0.01	0.01

OSHA – Occupational Safety & Health Administration
TWA – Time Weighted Average
ACGIH - American Conference of Industrial Hygienists
mg/m³ – milligrams per cubic meter
Bold – Exceeded a Exposure Standard

PEL - Permissible Exposure Limit
AL – Action Level
TLV - Threshold Limit Values
< - Less Than

Detailed industrial hygiene air sampling data sheets are presented in **Appendix 1** and laboratory analytical results are in **Appendix 2**. Employee notification letters are presented in **Appendix 3**.



Recommendations

The following recommendations are provided for your consideration:

- Per 1926.62(d)(8)(i) “Lead” regulation employers must, as soon as possible but no later than 5 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to employees. Employee notification letters have been provided in **Appendix 3** to assist in communicating results.
- OSHA’s construction standard 1926.1118 for Arsenic is identical to those set forth in the general industry regulation 1910.1018 for Arsenic. Thus the general industry regulation must be reference to determine regulatory requirements. Per 1910.1018(e)(5)(i) “Arsenic” regulation employers must, within 15 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to affected employees. Employee notification letters have been provided in **Appendix 3** to assist in communicating results.
- Consider further industrial hygiene evaluations if there are any changes in current operations, which may lead to higher or additional exposures. Additional exposure assessments during differing field conditions, weather conditions and on a periodic basis will provide further characterization of future employee exposures as well as the effectiveness of engineering controls, and employee work practices in reducing worker exposures.

Report Applicability

Results of this study are based on conditions observed during this survey. Any changes in control measures, work practices, personnel, or materials may seriously alter the results of this or any industrial hygiene exposure study.

If you have any questions concerning this study, please feel free to contact us.

Respectfully submitted,
Hygieneering, Inc.

Maira Garcia
Health & Safety Technician

Kevin M. Konkey, CSP, CET, CHMM
Vice President, Safety & Industrial Hygiene Services

John Feller CIH, CSP
President



APPENDICES



APPENDIX 1

INDUSTRIAL HYGIENE AIR SAMPLING DATA SHEETS



Hygieneering, Inc.

industrial hygiene, safety and environmental consulting services

Sample Number(s):

310-96422-1

Related Sample Numbers:

P-1

INDUSTRIAL HYGIENE AIR SAMPLING DATA SHEET

Material(s) Sampled For:

Lead & Arsenic

Name Employee Sampled Bob Ringberg	Project # 2016-3320	Shift Hours 7:00 am - 3:00 pm
Facility/Location Non-Responsive	Area/Department Alley & Front Garden	Date Sampled 12/20/2016
Description of Activities During Monitoring Bob Ringberg removed the soil from the designated area and unloaded/loaded soil/gravel from the dump truck. A morning safety briefing was conducted then the employees began to load equipment. At the end of the day the employees unloaded the equipment used for the day.		Additional Notes
PPE Worn During Work Activities Hard hat, gloves, boots, and safety glasses	Existing Engineering/Other Exposure Control Measures Work was conducted outside	Sampled By: Mara Garcia

SAMPLE DESCRIPTION				SAMPLE MEDIA			
<input checked="" type="checkbox"/> Personal-TWA	<input type="checkbox"/> Environmental	<input type="checkbox"/> Filter (PVC)	<input type="checkbox"/> Charcoal Tube	<input type="checkbox"/> Impinger Solution			
<input type="checkbox"/> Personal-STEL	<input type="checkbox"/> Bulk	<input checked="" type="checkbox"/> Filter (MCE)	<input type="checkbox"/> Treated Charcoal Tube	<input type="checkbox"/> Other:			
<input type="checkbox"/> Personal-Ceiling	<input type="checkbox"/> Other	<input type="checkbox"/> Glass Fiber Filter	<input type="checkbox"/> Silica Gel Tube	<input type="checkbox"/> Other Tube			
<input type="checkbox"/> Personal > 480 min		<input type="checkbox"/> Other Filter					
Air Sampling Instrument SKC Low Flow Sampling Pump		Calibration Method Rotameter		Initial Flow Rate (Liters/min) 2		Final Flow Rate (Liters/min) 2	
Start Time 8:07 AM	Stop Time 2:36 PM	Start Time N/A	Stop Time N/A	Total Sampling Time (Minutes) 389	Ave. Flow Rate (Liters/min) 2	Sample Volume (Liters) 778	

TWA DETERMINATION INFORMATION

Does this sample represent exposure over the entire shift? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> TWA cannot be calculated. Explain:
If no, explain: Assign zero exposure for <u>91</u> minutes of shift during period not sampled. Explain reason: Employees were not conducting any remediation activities while having a safety meeting and unloading/loading equipment in the parking lot.	Did any significant skin contact occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain:

Worker acknowledges personal breathing zone sample representative of typical exposure for the shift. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, explain:

CONTAMINANT	MEASURED CONCENTRATION	8-HR TWA	EXPOSURE STANDARD			
			OSHA AL	OSHA 8-HR PEL	ACGIH TLV	
Lead	0.00105 mg/m ³	0.0085 mg/m ³	0.03 mg/m ³	0.05 mg/m ³	0.05 mg/m ³	
Arsenic	<0.00188 mg/m ³	Non-detected	0.005 mg/m ³	0.01 mg/m ³	0.01 mg/m ³	

Laboratory & Login # Test America & 310-96422-1	Analytical Method NIOSH Method 7300 (Mod.)	QC By OAD	Date 12/28/2016
--	---	--------------	--------------------



Hygieneering, Inc.

industrial hygiene, safety and environmental consulting services

Sample Number(s):

310-96422-2

Related Sample Numbers:

P-2

INDUSTRIAL HYGIENE AIR SAMPLING DATA SHEET

Material(s) Sampled For:

Lead & Arsenic

Name Employee Sampled Ed. Olmos	Project # 2016-3320	Shift Hours 7:00 am - 3:00 pm
Facility/Location Non-Responsive	Area/Department Alley & Front Garden	Date Sampled 12/20/2016
Description of Activities During Monitoring Ed Olmos was the driver for the dump truck and assisted with the removal of soil when needed. A morning safety briefing was conducted then the employees began to load equipment. At the end of the day the employees unloaded the equipment used for the day.		Additional Notes
PPE Worn During Work Activities Hard hat, gloves, boots, and safety glasses	Existing Engineering/Other Exposure Control Measures Work was conducted outside	Sampled By: Mara Garcia

SAMPLE DESCRIPTION				SAMPLE MEDIA			
<input checked="" type="checkbox"/> Personal-TWA	<input type="checkbox"/> Environmental	<input type="checkbox"/> Filter (PVC)	<input type="checkbox"/> Charcoal Tube	<input type="checkbox"/> Impinger Solution			
<input type="checkbox"/> Personal-STEL	<input type="checkbox"/> Bulk	<input checked="" type="checkbox"/> Filter (MCE)	<input type="checkbox"/> Treated Charcoal Tube	<input type="checkbox"/> Other:			
<input type="checkbox"/> Personal-Ceiling	<input type="checkbox"/> Other	<input type="checkbox"/> Glass Fiber Filter	<input type="checkbox"/> Silica Gel Tube				
<input type="checkbox"/> Personal > 480 min		<input type="checkbox"/> Other Filter	<input type="checkbox"/> Other Tube				
Air Sampling Instrument SKC Low Flow Sampling Pump		Calibration Method Rotameter		Initial Flow Rate (Liters/min) 2		Final Flow Rate (Liters/min) 2	
Start Time 8:06 AM	Stop Time 2:36 PM	Start Time N/A	Stop Time N/A	Total Sampling Time (Minutes) 390	Ave. Flow Rate (Liters/min) 2	Sample Volume (Liters) 780	

TWA DETERMINATION INFORMATION

Does this sample represent exposure over the entire shift? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> TWA cannot be calculated. Explain:
If no, explain: Assign zero exposure for <u>90</u> minutes of shift during period not sampled. Explain reason: Employees were not conducting any remediation activities while having a safety meeting and unloading/loading equipment in the parking lot.	Did any significant skin contact occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain:

Worker acknowledges personal breathing zone sample representative of typical exposure for the shift. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, explain.

CONTAMINANT	MEASURED CONCENTRATION	8-HR TWA	EXPOSURE STANDARD			
			OSHA AL	OSHA 8-HR PEL	ACGIH TLV	
Lead	0.000605 mg/m ³	0.00049 mg/m ³	0.03 mg/m ³	0.05 mg/m ³	0.05 mg/m ³	
Arsenic	<0.00187 mg/m ³	Non-detected	0.005 mg/m ³	0.01 mg/m ³	0.01 mg/m ³	

Laboratory & Login # Test America & 310-96422-1	Analytical Method NIOSH Method 7300 (Mod.)	QC By OAD	Date 12/28/2016
--	---	--------------	--------------------



Hygieneering, Inc.

industrial hygiene, safety and environmental consulting services

Sample Number(s):

310-96422-4

Related Sample Numbers:

P-3

INDUSTRIAL HYGIENE AIR SAMPLING DATA SHEET

Material(s) Sampled For:

Lead & Arsenic

Name Employee Sampled Rosendo Calvo	Project # 2016-3320	Shift Hours 7:00 am - 3:00 pm
Facility/Location Non-Responsive	Area/Department Alley & Front Garden	Date Sampled 12/21/2016
Description of Activities During Monitoring Rosendo Calvo removed the soil from the designated areas where the operator could not reach and unloaded/loaded soil/gravel from the dump truck. A morning safety briefing was conducted then the employees began to load equipment. At the end of the day the employees unloaded the equipment used for the day.		Additional Notes Excavator was used for a majority of the removal process.
PPE Worn During Work Activities Hard hat, gloves, boots, and safety glasses	Existing Engineering/Other Exposure Control Measures Work was conducted outside	Sampled By: Mara Garcia

SAMPLE DESCRIPTION				SAMPLE MEDIA			
<input checked="" type="checkbox"/> Personal-TWA	<input type="checkbox"/> Environmental	<input type="checkbox"/> Filter (PVC)	<input type="checkbox"/> Charcoal Tube	<input type="checkbox"/> Impinger Solution			
<input type="checkbox"/> Personal-STEL	<input type="checkbox"/> Bulk	<input checked="" type="checkbox"/> Filter (MCE)	<input type="checkbox"/> Treated Charcoal Tube	<input type="checkbox"/> Other:			
<input type="checkbox"/> Personal-Ceiling	<input type="checkbox"/> Other	<input type="checkbox"/> Glass Fiber Filter	<input type="checkbox"/> Silica Gel Tube				
<input type="checkbox"/> Personal > 480 min		<input type="checkbox"/> Other Filter	<input type="checkbox"/> Other Tube				
Air Sampling Instrument SKC Low Flow Sampling Pump		Calibration Method Rotameter		Initial Flow Rate (Liters/min) 2		Final Flow Rate (Liters/min) 2	
Start Time 8:01 AM	Stop Time 1:32 PM	Start Time N/A	Stop Time N/A	Total Sampling Time (Minutes) 331	Ave. Flow Rate (Liters/min) 2	Sample Volume (Liters) 662	

TWA DETERMINATION INFORMATION

Does this sample represent exposure over the entire shift? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> TWA cannot be calculated. Explain:
If no, explain:	
Assign zero exposure for <u>149</u> minutes of shift during period not sampled. Explain reason: Employees were not conducting any remediation activities while having a safety meeting and unloading/loading equipment in the parking lot.	Did any significant skin contact occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain:

Worker acknowledges personal breathing zone sample representative of typical exposure for the shift. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, explain.

CONTAMINANT	MEASURED CONCENTRATION	8-HR TWA	EXPOSURE STANDARD			
			OSHA AL	OSHA 8-HR PEL	ACGIH TLV	
Lead	0.000615 mg/m ³	0.00044 mg/m ³	0.03 mg/m ³	0.05 mg/m ³	0.05 mg/m ³	
Arsenic	<0.00221 mg/m ³	Non-detected	0.005 mg/m ³	0.01 mg/m ³	0.01 mg/m ³	

Laboratory & Login # Test America & 310-96422-1	Analytical Method NIOSH Method 7300 (Mod.)	QC By OAD	Date 12/28/2016
--	---	--------------	--------------------



Hygieneering, Inc.

industrial hygiene, safety and environmental consulting services

Sample Number(s):

310-96422-5

Related Sample Numbers:

P-4

INDUSTRIAL HYGIENE AIR SAMPLING DATA SHEET

Material(s) Sampled For:

Lead & Arsenic

Name Employee Sampled Bob Ringberg	Project # 2016-3320	Shift Hours 7:00 am - 3:00 pm
Facility/Location Non-Responsive	Area/Department Alley & Front Garden	Date Sampled 12/21/2016
Description of Activities During Monitoring Bob Ringberg removed the soil from the designated areas where the operator could not reach and unloaded/loaded soil/gravel from the dump truck. A morning safety briefing was conducted then the employees began to load equipment. At the end of the day the employees unloaded the equipment used for the day.		Additional Notes Excavator was used for a majority of the removal process.
PPE Worn During Work Activities Hard hat, gloves, boots, and safety glasses	Existing Engineering/Other Exposure Control Measures Work was conducted outside	Sampled By: Mara Garcia

SAMPLE DESCRIPTION				SAMPLE MEDIA			
<input checked="" type="checkbox"/> Personal-TWA	<input type="checkbox"/> Environmental	<input type="checkbox"/> Filter (PVC)	<input type="checkbox"/> Charcoal Tube	<input type="checkbox"/> Impinger Solution			
<input type="checkbox"/> Personal-STEL	<input type="checkbox"/> Bulk	<input checked="" type="checkbox"/> Filter (MCE)	<input type="checkbox"/> Treated Charcoal Tube	<input type="checkbox"/> Other:			
<input type="checkbox"/> Personal-Ceiling	<input type="checkbox"/> Other	<input type="checkbox"/> Glass Fiber Filter	<input type="checkbox"/> Silica Gel Tube				
<input type="checkbox"/> Personal > 480 min		<input type="checkbox"/> Other Filter	<input type="checkbox"/> Other Tube				
Air Sampling Instrument SKC Low Flow Sampling Pump		Calibration Method Rotameter		Initial Flow Rate (Liters/min) 2		Final Flow Rate (Liters/min) 2	
Start Time 8:01 AM	Stop Time 1:34 PM	Start Time N/A	Stop Time N/A	Total Sampling Time (Minutes) 333	Ave. Flow Rate (Liters/min) 2	Sample Volume (Liters) 666	

TWA DETERMINATION INFORMATION

Does this sample represent exposure over the entire shift? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> TWA cannot be calculated. Explain:
If no, explain: Assign zero exposure for <u>147</u> minutes of shift during period not sampled. Explain reason: Employees were not conducting any remediation activities while having a safety meeting and unloading/loading equipment in the parking lot.	Did any significant skin contact occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain:

Worker acknowledges personal breathing zone sample representative of typical exposure for the shift. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, explain.

CONTAMINANT	MEASURED CONCENTRATION	8-HR TWA	EXPOSURE STANDARD			
			OSHA AL	OSHA 8-HR PEL	ACGIH TLV	
Lead	<0.000405 mg/m ³	Non-detected	0.03 mg/m ³	0.05 mg/m ³	0.05 mg/m ³	
Arsenic	<0.00219 mg/m ³	Non-detected	0.005 mg/m ³	0.01 mg/m ³	0.01 mg/m ³	

Laboratory & Login # Test America & 310-96422-1	Analytical Method NIOSH Method 7300 (Mod.)	QC By OAD	Date 12/28/2016
--	---	--------------	--------------------



APPENDIX 2

LABORATORY ANALYTICAL RESULTS – AIR SAMPLES

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Cedar Falls

704 Enterprise Drive

Cedar Falls, IA 50613

Tel: (319)277-2401

TestAmerica Job ID: 310-96422-1

Client Project/Site: IH - As & Pb, #2016-3320

For:

Hygieneering Inc

7575 Plaza Court

Willowbrook, Illinois 60527

Attn: Maira Garcia



Authorized for release by:

12/29/2016 9:28:17 AM

Brian Graettinger, Manager of Project Management

(319)277-2401

brian.graettinger@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Unless otherwise noted, analyses included in this report were performed by TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613.

TestAmerica Cedar Falls (Lab ID 101044) is accredited by the American Industrial Hygiene Association Laboratory Accreditation Programs (AIHA-LAP), LLC in the industrial hygiene program for the analytical techniques noted on the scope of accreditation for the following methods: NIOSH 0500, NIOSH 0600, NIOSH 1003, NIOSH 1005, NIOSH 1022, NIOSH 1300, NIOSH 1500, NIOSH 1501, NIOSH 1615, OSHA 07, NIOSH 7303 and NIOSH 9102. Volatile Organic Compounds accredited for Solid Sorbent Tubes and 3M Organic Vapor Monitors.

Method Modifications: TestAmerica Cedar Falls performs NIOSH 9102 Elements on Wipes with the following method modification – HNO₃ is used as the digestion acid with no HClO₄ utilized at any time during the analysis.

Unless otherwise noted, all method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report. Gravimetric analyses are not mathematically adjusted for blank values. Unless otherwise noted, all other sample results have been mathematically adjusted for blank values. The methods utilized for the analyses are fit for the intended use.



Brian Graettinger
Manager of Project Management
12/29/2016 9:28:17 AM

Case Narrative

Client: Hygieneering Inc
Project/Site: IH - As & Pb, #2016-3320

TestAmerica Job ID: 310-96422-1

Job ID: 310-96422-1

Laboratory: TestAmerica Cedar Falls

Narrative

Job Narrative
310-96422-1

Comments

No additional comments.

Receipt

The samples were received on 12/22/2016 1:33 PM in good condition.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Industrial Hygiene

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Hygieneering Inc
Project/Site: IH - As & Pb, #2016-3320

TestAmerica Job ID: 310-96422-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-96422-1	P-1	Air	12/20/16 00:00	12/22/16 13:33
310-96422-2	P-2	Air	12/20/16 00:00	12/22/16 13:33
310-96422-3	B-1	Air	12/20/16 00:00	12/22/16 13:33
310-96422-4	P-3	Air	12/21/16 00:00	12/22/16 13:33
310-96422-5	P-4	Air	12/21/16 00:00	12/22/16 13:33
310-96422-6	B-2	Air	12/21/16 00:00	12/22/16 13:33

Client Sample Results

Client: Hygieneering Inc
Project/Site: IH - As & Pb, #2016-3320

TestAmerica Job ID: 310-96422-1

Client Sample ID: P-1

Lab Sample ID: 310-96422-1

Date Collected: 12/20/16 00:00

Matrix: Air

Date Received: 12/22/16 13:33

Sample Air Volume: 778 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: 7300 - NIOSH Method 7300 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result ug/m3	Qualifier	RL ug/Sample	Analyzed	Dil Fac	Analyst
Arsenic	<1.46	<0.00188	<1.88		5.00	12/28/16 18:56	1	OAD
Lead	0.816	0.00105	1.05	J	2.50	12/28/16 18:56	1	OAD

Client Sample ID: P-2

Lab Sample ID: 310-96422-2

Date Collected: 12/20/16 00:00

Matrix: Air

Date Received: 12/22/16 13:33

Sample Air Volume: 780 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: 7300 - NIOSH Method 7300 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result ug/m3	Qualifier	RL ug/Sample	Analyzed	Dil Fac	Analyst
Arsenic	<1.46	<0.00187	<1.87		5.00	12/28/16 19:02	1	OAD
Lead	0.472	0.000605	0.605	J	2.50	12/28/16 19:02	1	OAD

Client Sample ID: B-1

Lab Sample ID: 310-96422-3

Date Collected: 12/20/16 00:00

Matrix: Air

Date Received: 12/22/16 13:33

Sample Air Volume: 0 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: 7300 - NIOSH Method 7300 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result ug/m3	Qualifier	RL ug/Sample	Analyzed	Dil Fac	Analyst
Arsenic	<1.46				5.00	12/28/16 19:04	1	OAD
Lead	<0.270				2.50	12/28/16 19:04	1	OAD

Client Sample ID: P-3

Lab Sample ID: 310-96422-4

Date Collected: 12/21/16 00:00

Matrix: Air

Date Received: 12/22/16 13:33

Sample Air Volume: 662 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: 7300 - NIOSH Method 7300 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result ug/m3	Qualifier	RL ug/Sample	Analyzed	Dil Fac	Analyst
Arsenic	<1.46	<0.00221	<2.21		5.00	12/28/16 19:06	1	OAD
Lead	0.407	0.000615	0.615	J	2.50	12/28/16 19:06	1	OAD

Client Sample ID: P-4

Lab Sample ID: 310-96422-5

Date Collected: 12/21/16 00:00

Matrix: Air

Date Received: 12/22/16 13:33

Sample Air Volume: 666 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: 7300 - NIOSH Method 7300 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result ug/m3	Qualifier	RL ug/Sample	Analyzed	Dil Fac	Analyst
Arsenic	<1.46	<0.00219	<2.19		5.00	12/28/16 19:09	1	OAD
Lead	<0.270	<0.000405	<0.405		2.50	12/28/16 19:09	1	OAD

TestAmerica Cedar Falls

Client Sample Results

Client: Hygieneering Inc
Project/Site: IH - As & Pb, #2016-3320

TestAmerica Job ID: 310-96422-1

Client Sample ID: B-2

Lab Sample ID: 310-96422-6

Date Collected: 12/21/16 00:00

Matrix: Air

Date Received: 12/22/16 13:33

Sample Air Volume: 0 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: 7300 - NIOSH Method 7300 (Modified)

Analyte	Result ug/Sample	Result	Result	Qualifier	RL ug/Sample	Analyzed	Dil Fac	Analyst
Arsenic	<1.46				5.00	12/28/16 18:03	1	OAD
Lead	<0.270				2.50	12/28/16 18:03	1	OAD

Certification and Definitions Summary

Client: Hygieneering Inc
Project/Site: IH - As & Pb, #2016-3320

TestAmerica Job ID: 310-96422-1

Laboratory: TestAmerica Cedar Falls

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	N/A	09-29-17
Illinois	NELAP	5	200024	11-29-17
Iowa	State Program	7	007	12-01-17
Kansas	NELAP	7	E-10341	01-31-18
Minnesota	NELAP	5	019-999-319	12-31-17
Minnesota (Petrofund)	State Program	1	3349	08-22-17
North Dakota	State Program	8	R-186	09-29-17
Oregon	NELAP	10	IA100001	09-29-17

Qualifiers

IH - Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Hygieneering Inc
Project/Site: IH - As & Pb, #2016-3320

TestAmerica Job ID: 310-96422-1

Method	Method Description	Protocol	Laboratory
7300	NIOSH Method 7300 (Modified)	NIOSH	TAL CF

Protocol References:

NIOSH = NIOSH Manual Of Analytical Methods, National Institute For Occupational Safety And Health, 4th Edition, August 1994.

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



310-96422 Chain of Custody

THE
Ce
70
Ce
Ph.
Fax: (319) 277-2425
www.testamericainc.com

Laboratory Chain of Custody Form

and Report To: mgarcia@hygieneering.com (Maira Garcia)

and Invoice To: konkey@hygieneering.com (Kevin Konkey)

Company: Hygieneering, Inc.

Address: 7575 Plaza Court

City, State, Zip: Willowbrook, IL 60527

Phone: 630.440.4706 Fax: _____ Email Address: mgarcia@hygieneering.com

Page: 1 of 1

Sampler: _____ Project Name: _____ Project No.: 2016-3320 P.O. #: _____

Lab Number (Internal use Only)	Date Sampled	Sample Identification	Media Type (Filter, Tube, Passive Monitor)	Analysis Method(s)/Analytes(s)	Sampling Time (Minutes)	Air Volume (Liters)	Pump ID
	12/20/16	P-1	0.8 MCEF	Lead & Arsenic	389	778	—
	12/20/16	P-2			390	780	—
	12/20/16	B-1			—	—	—
	12/21/16	P-3			331	662	—
	12/21/16	P-4			333	666	—
	12/21/16	B-2			—	—	—

Sample Receipt	Reporting/Deliverables	Turn Around Time Requested
Temperature _____ °C Sample Seals: Yes _____ No _____ Sample Seals Intact: Yes _____ No _____ Total # of Samples: <u>5</u>	Hardcopy Results: Yes _____ No <u>X</u> E-Mail Results: Yes <u>X</u> No _____ EDD: Yes _____ No _____ Type: _____ Data Package: Standard Level II: _____ Level III: _____ Level IV: _____	Next Day by 6pm _____ 2 Business Days _____ 3 Business Days _____ 4 Business Days _____ <u>X</u> Standard 7 Business Days RUSH Charges Authorized Yes _____ No _____ Subject to scheduling and availability (RUSH surcharges apply)

Instructions / Special Requirements: _____

Date	Time	Samples Relinquished By	Received By
12/21/16		Maira Garcia - Hyg.	
12-22-16	820		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

704 Enterprise Drive • Cedar Falls, IA 50613

Tel 319-277-2401 • Fax 319-277-2425

IH Sample Receipt Form

Client: Hygieneering Project: _____

City: Willowbrook IL

Date: 12-22-16 Receiver's Initials: GV Time (Delivered): 820

COC completed correctly? ☒ Yes ☐ No
(Cite inconsistencies below)

Sample Checklist (Mark non-conformance or acceptance)

<input type="checkbox"/>	Received Broken	<input type="checkbox"/>	Information Missing
<input type="checkbox"/>	Improper Media	<input type="checkbox"/>	Missing Sample
<input type="checkbox"/>	Missing Label	<input type="checkbox"/>	Sample Past Hold Date
<input type="checkbox"/>	Temperature	<input type="checkbox"/>	Extra Sample
<input type="checkbox"/>	COC Discrepancy	<input type="checkbox"/>	Insufficient Sample Volume
<input type="checkbox"/>	Other:		

☒ The samples, as received, are acceptable for analysis

Couriers

<input checked="" type="checkbox"/>	UPS	<input type="checkbox"/>	TA Courier
<input type="checkbox"/>	FedEx	<input type="checkbox"/>	Client
<input type="checkbox"/>	FedEx Ground	<input type="checkbox"/>	Other:
<input type="checkbox"/>	USPS	<input type="checkbox"/>	
<input type="checkbox"/>	Spee-Dee	<input type="checkbox"/>	

<input checked="" type="checkbox"/>	Samples not received in a cooler
<input checked="" type="checkbox"/>	Temperature not taken

Reviewed by: sd Date: 12/22/16

Comments sd



APPENDIX 3

EMPLOYEE NOTIFICATION LETTERS

January 12, 2017

Mr. Bob Ringberg
R.W. Collins Company
7225 West 66th Street
Chicago, Illinois 60638

RE: Personal Air Sampling Results for Lead & Arsenic

Dear Mr. Bob Ringberg,

On December 20th and 21st, 2016 R.W. Collins conducted a study to determine your personal exposure to lead and arsenic. This letter is to notify you of the results of the exposure monitoring.

Your personal exposures were below the Occupational Safety & Health Administration (OSHA) Action Limit (AL) and Permissible Exposure Limit (PEL) as well as the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs).

The table below summarizes your personal air sampling results:

Date Sampled	CONTAMINANT (Sample ID)	8-HOUR TWA (mg/m ³)	EXPOSURE STANDARD		
			OSHA - AL (mg/m ³)	OSHA - PEL (mg/m ³)	ACGIH - TLV (mg/m ³)
12/20/2016	Lead	0.00085	0.03	0.05	0.05
	Arsenic	Non-Detected	0.005	0.01	0.01
12/21/2016	Lead	Non-Detected	0.03	0.05	0.05
	Arsenic	Non-Detected	0.005	0.01	0.01

OSHA – Occupational Safety & Health Administration
TWA – Time Weighted Average
ACGIH - American Conference of Industrial Hygienists
mg/m³ – milligrams per cubic meter
Bold – Exceeded a Exposure Standard

PEL - Permissible Exposure Limit
AL – Action Level
TLV - Threshold Limit Values
< - Less Than

Continue to utilize available engineering controls and good hygiene practices to assist in reducing personal exposure to lead and arsenic. This document satisfies OSHA's employee notification requirements per 29 CFR 1926.62 for lead as well as 29 CFR 1926.1118 for Arsenic.

If you have any questions regarding this monitoring, please contact the Environmental, Safety & Health Department.

Reviewed by:
R.W. Collins Company

Acknowledged by Employee

Date

cc: Human Resources/Medical Department

January 12, 2017

Mr. Edward Olmos
R.W. Collins Company
7225 West 66th Street
Chicago, Illinois 60638

RE: Personal Air Sampling Results for Lead & Arsenic

Dear Mr. Edward Olmos,

On December 20, 2016 R.W. Collins conducted a study to determine your personal exposure to lead and arsenic. This letter is to notify you of the results of the exposure monitoring.

Your personal exposures were below the Occupational Safety & Health Administration (OSHA) Action Limit (AL) and Permissible Exposure Limit (PEL) as well as the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs).

The table below summarizes your personal air sampling results:

Date Sampled	CONTAMINANT (Sample ID)	8-HOUR TWA (mg/m ³)	EXPOSURE STANDARD		
			OSHA – AL (mg/m ³)	OSHA – PEL (mg/m ³)	ACGIH – TLV
12/20/2016	Lead	0.00049	0.03	0.05	0.05
12/20/2016	Arsenic	Non-Detected	0.005	0.01	0.01

OSHA – Occupational Safety & Health Administration
TWA – Time Weighted Average
ACGIH - American Conference of Industrial Hygienists
mg/m³ – milligrams per cubic meter
Bold – Exceeded a Exposure Standard

PEL - Permissible Exposure Limit
AL – Action Level
TLV - Threshold Limit Values
< - Less Than

Continue to utilize available engineering controls and good hygiene practices to assist in reducing personal exposure to lead and arsenic. This document satisfies OSHA's employee notification requirements per 29 CFR 1926.62 for lead as well as 29 CFR 1926.1118 for Arsenic. If you have any questions regarding this monitoring, please contact the Environmental, Safety & Health Department.

Reviewed by:
R.W. Collins Company

Acknowledged by Employee

Date

cc: Human Resources/Medical Department

January 12, 2017

Mr. Rosendo Calvo
R.W. Collins Company
7225 West 66th Street
Chicago, Illinois 60638

RE: Personal Air Sampling Results for Lead & Arsenic

Dear Mr. Rosendo Calvo,

On December 21st, 2016 R.W. Collins conducted a study to determine your personal exposure to lead and arsenic. This letter is to notify you of the results of the exposure monitoring.

Your personal exposures were below the Occupational Safety & Health Administration (OSHA) Action Limit (AL) and Permissible Exposure Limit (PEL) as well as the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs).

The table below summarizes your personal air sampling results:

Date Sampled	CONTAMINANT (Sample ID)	8-HOUR TWA (mg/m ³)	EXPOSURE STANDARD		
			OSHA – AL (mg/m ³)	OSHA – PEL (mg/m ³)	ACGIH – TLV
11/24/2015	Lead	0.00044	0.03	0.05	0.05
11/24/2015	Arsenic	Non-Detected	0.005	0.01	0.01

OSHA – Occupational Safety & Health Administration
TWA – Time Weighted Average
ACGIH - American Conference of Industrial Hygienists
mg/m³ – milligrams per cubic meter
Bold – Exceeded a Exposure Standard

PEL - Permissible Exposure Limit
AL – Action Level
TLV - Threshold Limit Values
< - Less Than

Continue to utilize available engineering controls and good hygiene practices to assist in reducing personal exposure to lead and arsenic. This document satisfies OSHA's employee notification requirements per 29 CFR 1926.62 for lead as well as 29 CFR 1926.1118 for Arsenic.

If you have any questions regarding this monitoring, please contact the Environmental, Safety & Health Department.

Reviewed by:
R.W. Collins Company

Acknowledged by Employee

Date

cc: Human Resources/Medical Department